BALD RIDGE AGGREGATE AREA

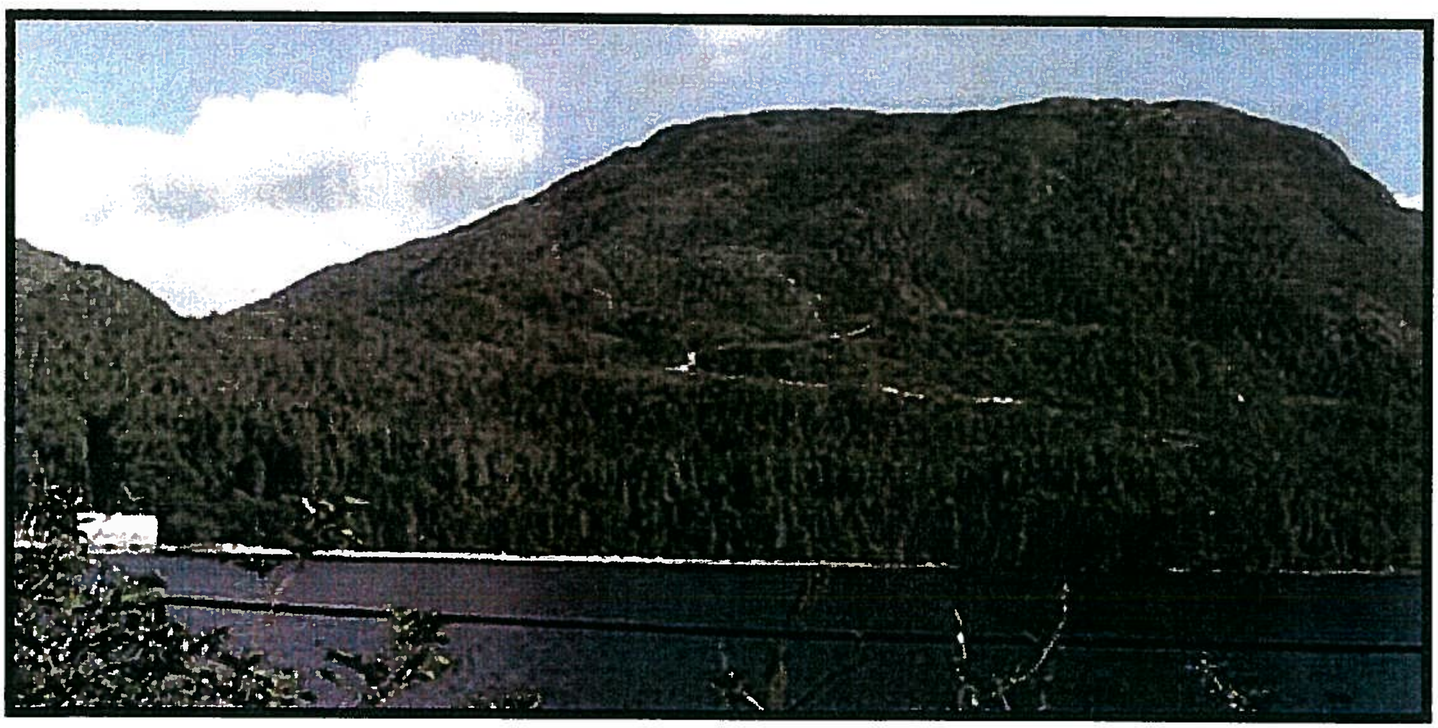
Metlakatla Indian Community
of the
Annette Islands Reserve, Alaska
April, 2002

EXHIBIT
6

CONTENTS

Highlights- Bald Ridge Aggrègate Project

- o Over 200 million tons of identified geological reserves
- o Two hydro generator plants and a diesel generator with a total capability of 10,107 KW per hour. One plant, Purple Lake (3900kw) is on north side of the project area
- o Enterprise Community - tax incentives that benefit outside businesses looking to venture into the Community. Highlights include $20,000 per year for every Indian employed plus $3,500 for the first year, and $5,000 for the second year for each new hire on the work to welfare program or a credit up to $2,400 against Federal taxes for businesses for each new hire from groups that have high unemployment rates or other special employment needs.
- o Direct access to a deep water port
- o No State, Sales, Corporate, Property, or Mining Taxes
- o Unlimited fresh water supplies
- o Available labor force
- o Many Enivornment Studies have been completed
- o 5938 feet of drilling complete
- o Engineering and geological studies available for review
- o Preliminary marketing study complete
- o Adequate transportation system in place
- o Excellent recreation/living environment
- o Progressive political climate
- o Tribe is applying for DOT's Disadvantaged Business Enterprises (DBE) program anb SBA's 8(a) Business Development and Small Disadvantaged Business Certication.



Bald Ridge Aggregate Area looking across Tamgas Harbor showing Purple Lake Hydro-generator and drill roads

COUNCIL ANNETTE ISLANDS RESERVE

METLAKATLA INDIAN COMMUNITY

Victor C. Wellington, Sr., Mayor
Judith A. Lattie, Secretary
Opal J. Hudson, Treasurer

Established 1887

Post Office Box 8
Metlakatla, Alaska 99926
Phone (907) 886-4441
Fax (907) [illegible]

March 4, 2002

The Council and the Executives of the Metlakatla Indian Community is pleased to present the updated information on the Bald Ridge Aggregate Project (BRAP). Since the release of the previous Bald Ridge Aggregate Area Handbooks, several sections have been updated and new information has been added. There is new information on the completed engineering and geological studies of 5938 feet of drilled rock core, over 200 million tons of reserve has been identified and an entire section has been added on the Metlakatla Indian Community Enterprise tax incentives. Several other Bald Ridge Aggregate Project highlights have also been identified such as: current market conditions for the Seattle/Tacoma, Washington area, direct access to a deep water port in Tamgas Harbor, direct access to the Purple Lake Hydro Electric Plant (3900 kW), unlimited fresh water supply, available labor force and training of labor force in several aspects of quarry operations, and completed environmental documents that provide information on Annette Island and the project area.

The Metlakatla Indian Community has a strong working relationship with Federal and Alaska State Agencies for project development. Meetings have already taken place with several Federal and Alaska State Agencies on the BRAP and compilation of information for an environmental document for the project site has started with the assistance of these Agencies.

If you require additional information on the BRAP or would prefer an opportunity to verify the information provided in the Handbook by visiting the project site, please contact me at (907) 886-4441 or Faline Haven, Project Coordinator at (907) 886-5111.

Sincerely,
METLAKATLA INDIAN COMMUNITY

Victor Wellington, Sr.

Victor Wellington, Sr., Mayor

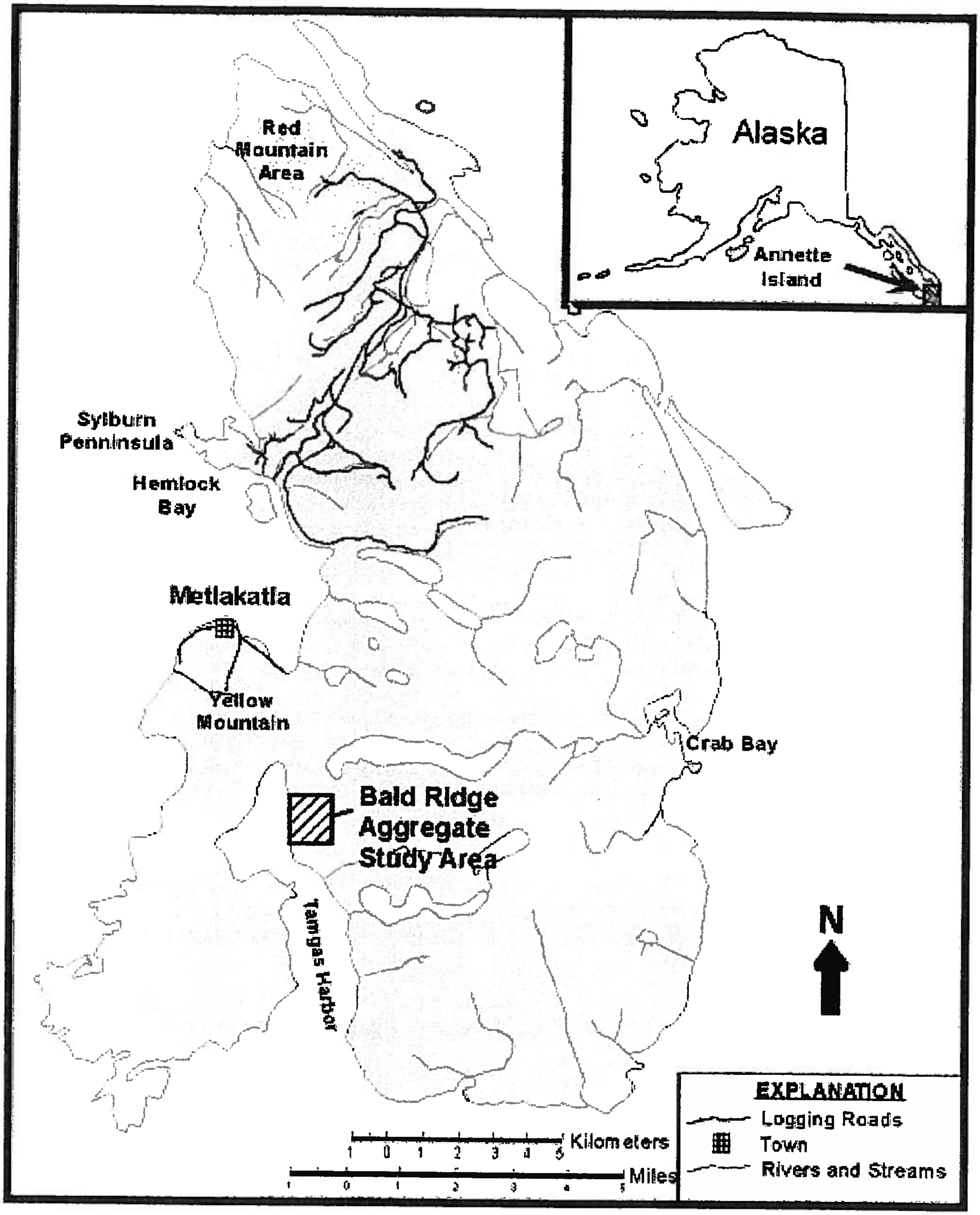


Figure 1 - Location map of Annette Islands Indian Reserve and the Bald Ridge Aggregate Study Area

THE BALD RIDGE AGGREGATE PROJECT

INTRODUCTION

The Tribal Council of the Metlakatla Indian Community (MIC), Annette Islands Reserve, Alaska and the Bureau of Indian Affairs Division of Energy and Mineral Resources (DEMR) has located a potential crushed rock quarry site on the southern portion of the island (Figure 1). The Bald Ridge Area Project's (BRAP) northern extent is placed at the MIC Hydro Plant and pipeline and the western boundary is Tamgas Harbor (Figure 2). At the northern boundary, a pipe carries water from Purple Lake to the Purple Lake hydroelectric plant. The southern and eastern extent of the deposit have yet to be determined. Calculation of the geological reserves in the BRAP area indicates that there is over 200 million tons of crushed rock. Bald Ridge has the potential to be developed as the first large resource crushed granitic rock quarry in the northern West Coast. Rock can be crushed at the quarry and loaded directly into either tug & tandem barge or self loading Panamax class bulk ships for transport to the West Coast and other Pacific Rim construction sites.

Bedrock Geology

Bedrock units in Southeast Alaska have been divided into fault-bounded stratigraphic terranes. The bedrock units of the Annette Islands Reserve are part of the Annette subterrane of the Alexander terrane. Two thirds of the island is dominated by the Silurian-age, granitic Annette Pluton, that is moderately to strongly deformed and was intruded into greenschist to amphibolite grade metamorphic rock. The Annette Pluton ranges in composition from granite to leuco-trondhjemite to quartz diorite. Host rocks to this pluton include meta-diorite, marble, quartzite, pelite, and greenstone. The Annette Pluton is overlain by metamorphosed Devonian and Silurian marine rocks including meta-conglomerate, marble, meta-pelite, greenstone, and meta-volcaniclastic rocks.

The bedrock of the area within the Bald Ridge Area is underlain totally by the Annette pluton. The Annette pluton in the BRAP area is predominately quartz diorite with minor occurrences of intermediate dikes and quartz veins.

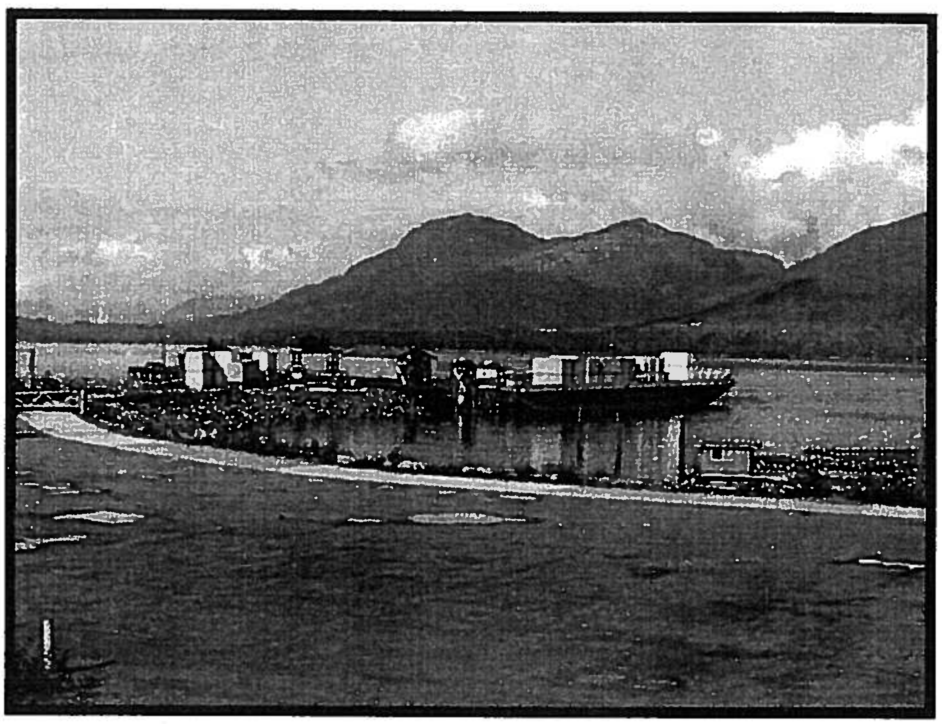
Typical core from the Bald Ridge Aggregate Area

Market Study

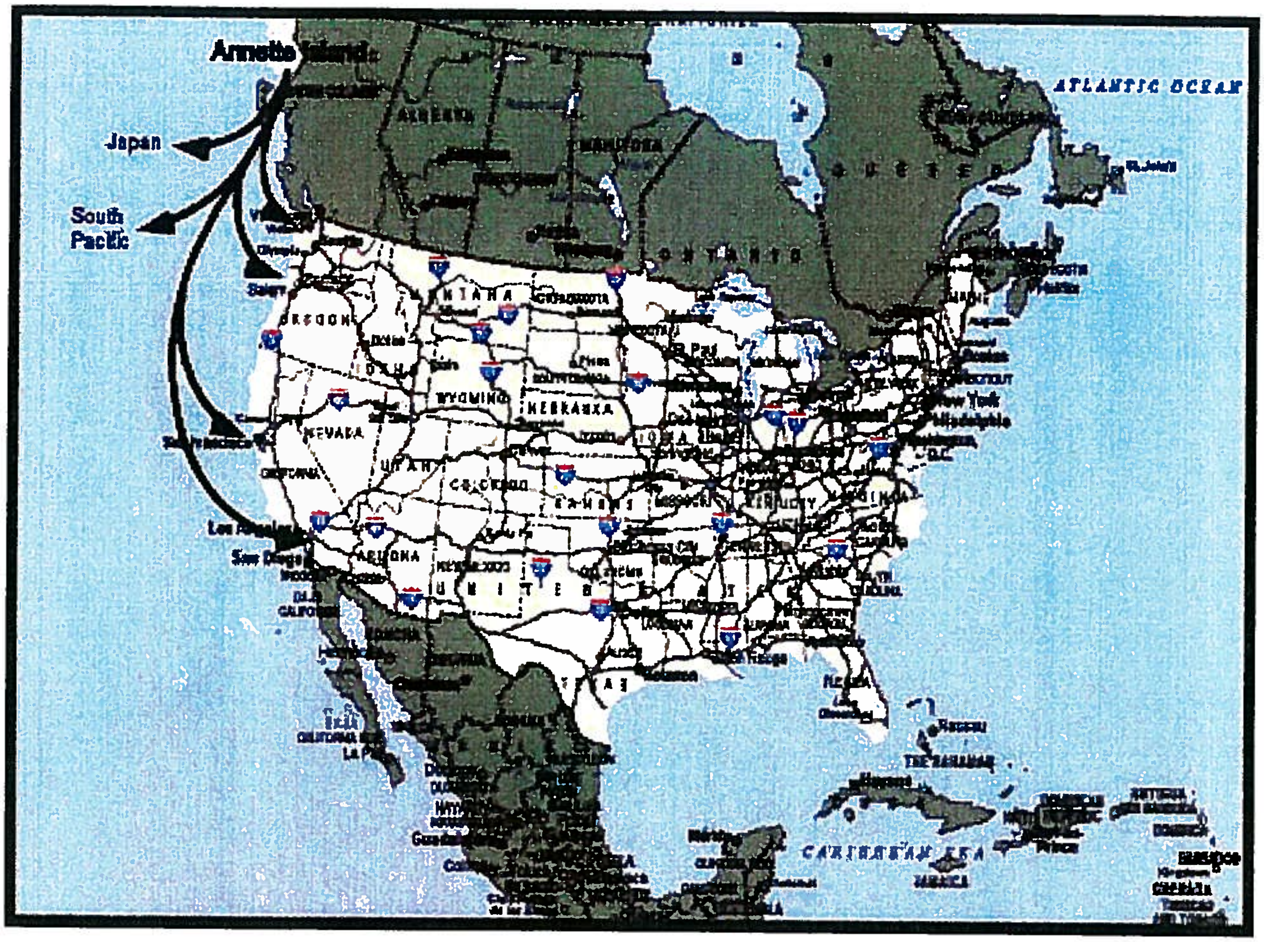
The Bald Ridge Project offers two outstanding advantages: (1) huge shoreline resources of commercial crushed rock, and (2) location on a sheltered marine bay with ready barge access to the Puget Sound and Straits of Juan de Fuca/Georgia in Washington state, and eventually to California and Western Pacific markets. Other reservations with commercial rock potential lie mostly inland, far from the major coastal urban markets.

The Greater Seattle-Tacoma Metro Area aggregate market in western King County and parts of adjacent rapidly-urbanizing Pierce and Snohomish Counties are aggregate deficient, facing rapidly-depleting local sources, and are already importing over five percent of their supply from Canadian sources. High-quality crushed rock sources in northern Snohomish County and adjacent Skagit County lie mostly over 60 miles from the Greater Seattle markets. Truck transport costs into the urban centers on highly congested freeways and highways commonly exceed the cost of barging crushed rock from Annette Islands Reserve. Substitution of rock from river gravel and glacial deposit sources cannot meet all specifications unique to crushed hard-rock supplies.

Total aggregate demand of the Greater Seattle Area in 2001 is estimated at 36 million tons, of which nearly 4 million tons were for specification crushed hardrock. Continued rapid growth in this region will force aggregate consumption much higher for normal residential and commercial uses, and especially higher for highway construction and other major infrastructural use. Aggregate demands for the Seattle-Tacoma Airport Runway Expansion, Second Tacoma Narrows Bridge project, I-5 freeway reconstruction in the Seattle-Everett and Tacoma-Olympia sectors, King-Pierce Counties Rail Transit System construction, entire Alaska Way Viaduct Replacement, and Evergreen Bridge replacement across Lake Washington are all federally-supported projects that will place a staggering additional aggregate demand on the market over the next 3-10 years. Past state-level complacency as-



Barging facilities at Metlakatla, AK



Potential Markets for a Quarry on Annette Island

suming that any Washington rock shortfalls could be made up from Canadian sources is now running into competing importation by California users – nearly 3 million tons in 2002 and certain to swell to over 10 million tons within a decade.

The U.S. Corps of Engineers , acting for its own uses and as the lead agency in much other regional Federal agency construction has expresses strong interest in supporting Native American aggregate sources, such as the Bald Ridge Project, for supply of crushed rock to Federally-funded projects in Washington state. It has also indicated that the Bald Ridge source would find very strong interest in supply of jetty stone and rip rap for the entire West Coast, which has very few remaining "large stone" shoreline sources.

The Bald Ridge Project is economically viable as a "stand alone" project, but will find much easier market entry and distribution efficiency by teaming with existing aggregate producers or users in the Puget Sound region.

The Tribe is a disadvantaged minority small business which gives the tribe certain advantages when bidding for projects that have Federal dollars attached to them. The Tribe is applying to Department of Transportation's Disadvantaged Business Enterprises (DBE) program, which provides a flexible national 10% to 30% goal for the participation of disadvantaged business enterprises, such as the Metlakatla Tribe, in highway and transit contracting undertaken with Federal funding. In addition, the Tribe is also applying for Small Business Administration's 8(a) Business Development and Small Disadvantaged Business Certication.

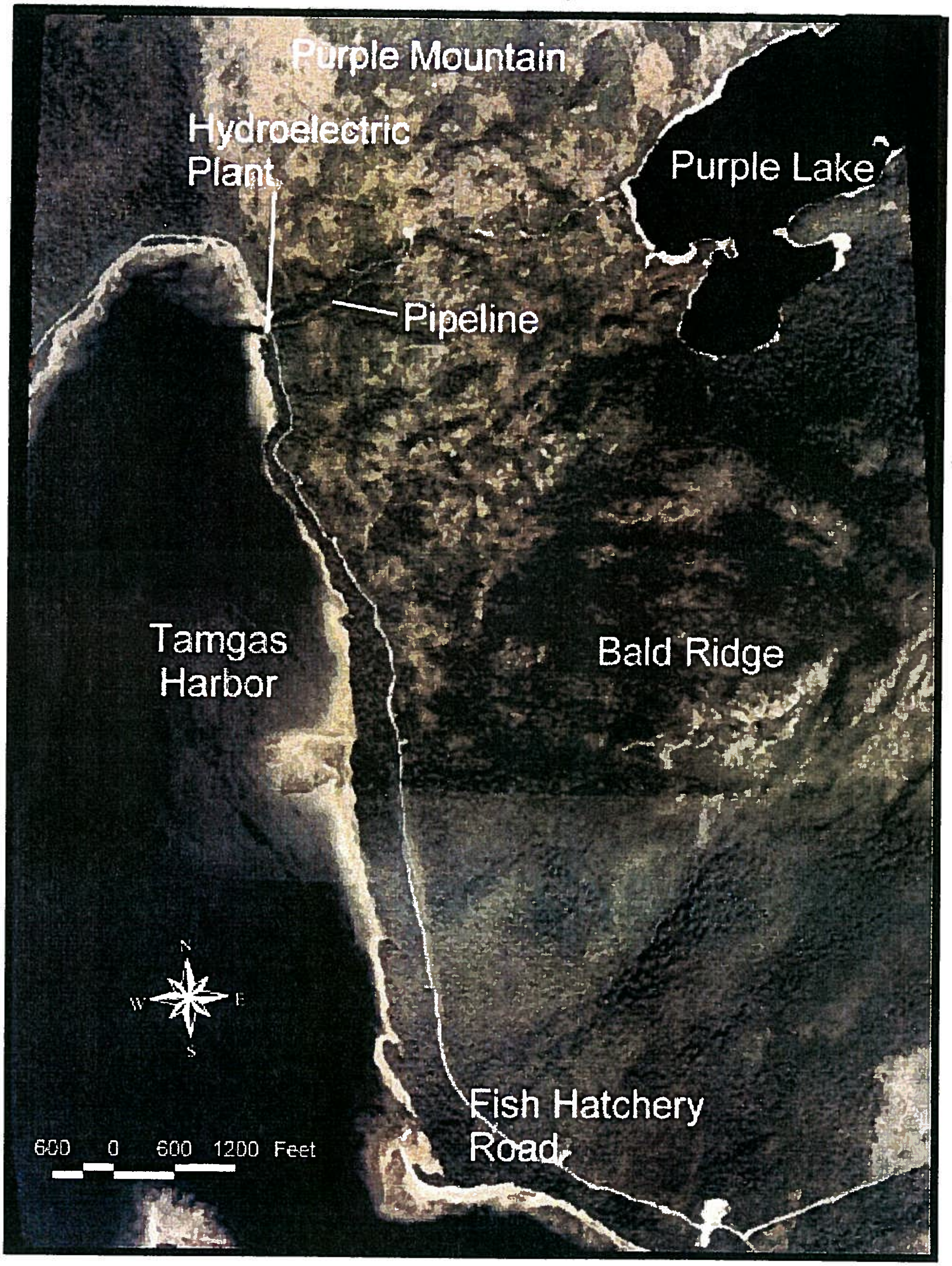


Figure 2 - Aerial photo of the Bald Ridge aggregate area

Geological and Engineering Studies

In 1999, the DEMR collected surface samples and later tested them using the Los Angeles Degradation and the sulfate soundness tests, along with whole rock analysis and inductively coupled plasma (ICP) by ALS Chemex Laboratories. The purpose of

Geologist logging drill core

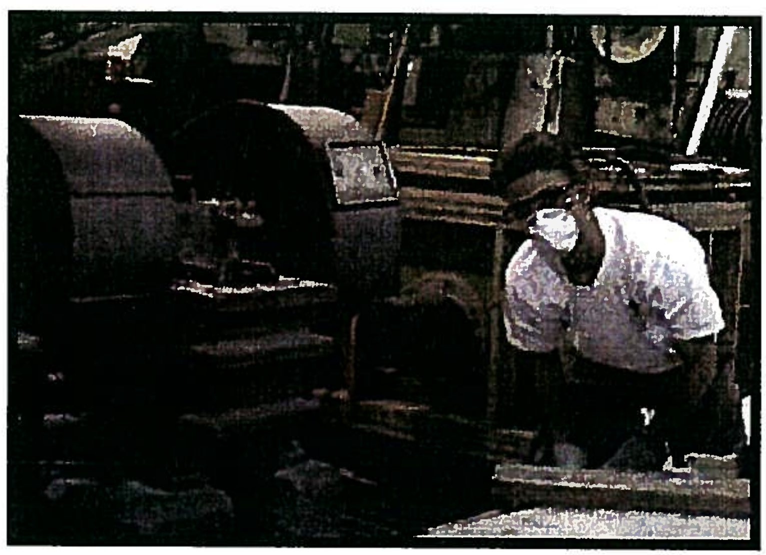
this initial sampling was to determine areas for potential aggregate production.

Detailed field mapping has produced structural data used in determining areas with potential for producing riprap, armor stone, and jetty stone. Field data was collected from the existing quarries along Fish Hatchery Road as well as from outcrops along the hillside east of Fish Hatchery Road. Several faults and a shear zone were mapped out within the BRAP study area. These geological features do not appear to affect the quality of the rock with regard to the LA degradation and the sulfate soundness tests.

The Tribe had thirteen holes drilled along Fish Hatchery Road (Figure 3) during the winter of 2000. DEMR geologists then logged, photographed the recovered core and shipped the core to Lakewood, Colorado for testing. Based on very favorable results the additional drilling east of Fish Hatchery Road (Figure 3) was conducted during the summer of 2000. Approximately 5,938 feet of drill core from 27 drill holes has been recovered in the BRAP area.

DEMR geologists have separated and crushed the core into samples that represent 20 foot and 40 foot benches. The percent loss due to crushing was determined at this time. DEMR will use this information in determining the amount of material lost during the excavation process (Appendix 1). The purpose of this initial sampling was to determine areas for potential aggregate production.

Colorado School of Mines (CSM) students, under contract with MIC and DEMR have performed uniaxial compressive strength tests on the core drilled in the winter of 2000 and the summer of 2000 drilling.



Geologist separating and crushing the core

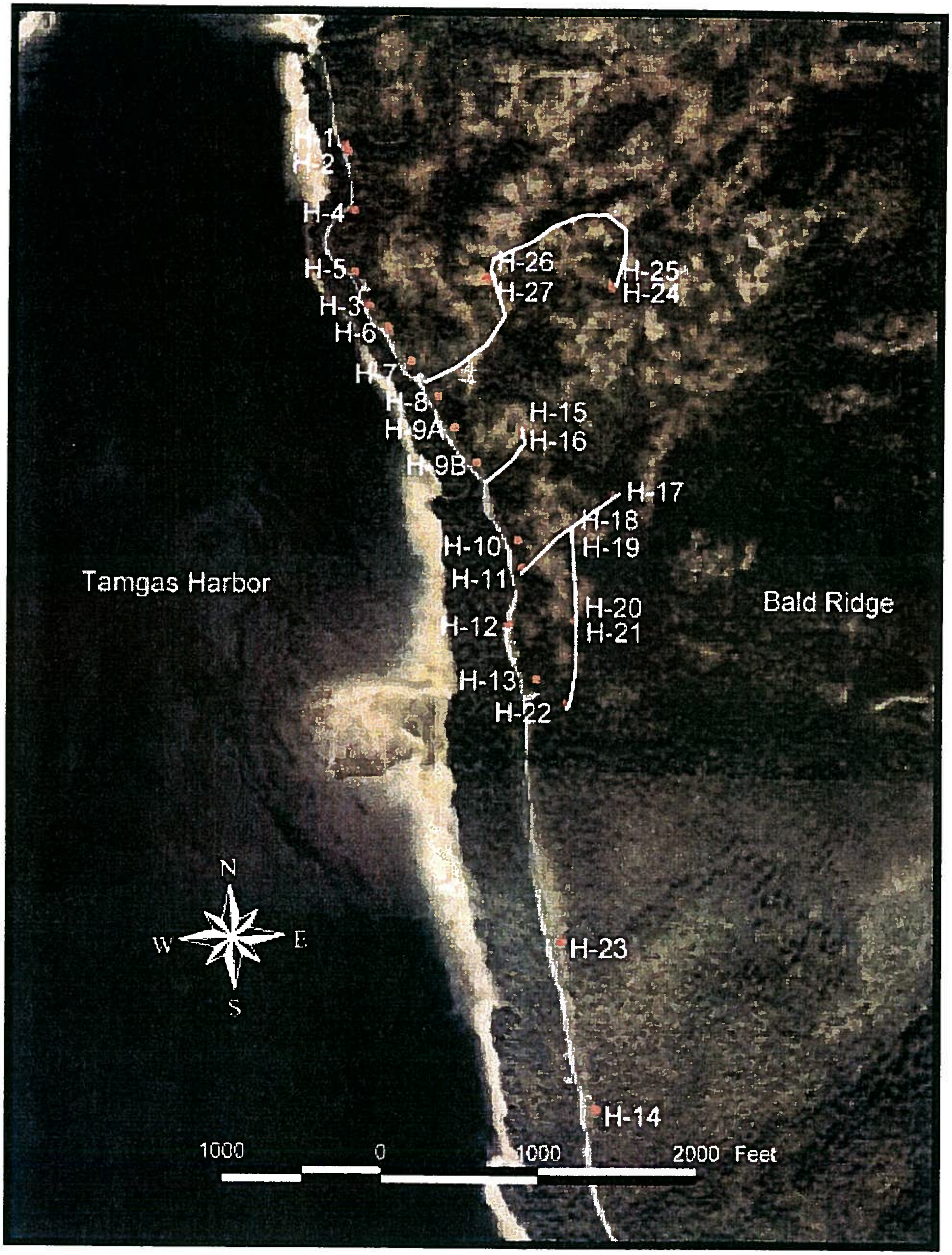


Figure 3 - Aerial photo of the Bald Ridge aggregate area showing drill roads and drill hole sites

Petrologic Analysis

A petrologic analysis was conducted in accordance with ASTM C 295-90, on the recovered drill core to determine the overall mineral composition of the rock, as well as determine any potentially detrimental minerals or element as it pertains to the production of aggregate. A series of tests are being conducted on the rock to obtain this information. The three main procedures that are used include:

1) Thin section analysis
2) Geochemical analysis
3) Calculation of the CIPW Norm

Thin sections were created from the recovered drill core along Fish Hatchery Road as well as from the 4800 feet of core drilled east of the road. This involves determining the mineralogy of each sample, mineral percentages, and overall rock type. Other features of importance that were noted include micro-fractures, alteration, and presence of sulfide minerals.

Using the whole rock analysis data obtained from the geochemical analysis, a CIPW Norm calculation was performed. This calculation uses the mole percentages of oxides present in the rock and calculates the minerals that would form if the initial magma had cooled slowly. This calculation does not take into effect later alteration or secondary crystallization. The CIPW Norm calculation is used in conjunction with a thin section analysis to compare differences in lithology due to alteration or later mineralization.

Preliminary results for the petrologic analysis indicate that the rock at Bald Ridge is primarily a Tonalite, with mineralogic variation to diorite, granite, and quartz monzodiorite. The primary constitutes of this rock are plagioclase, quartz, and alkali-feldspar. Some secondary minerals that are present include: titanite, hornblende, chlorite, calcite, pyrite, and various clay minerals. A mafic dike is also present in the study area, but makes up less than 1% of the total rock mass volume.

Drilling on the Bald Ridge Aggregate Area

Engineering Tests

The MIC contracted CTC Geotek, a Denver-based geotechnical testing laboratory, for the Los Angeles degradation and sulfate soundness tests. CSM personnel under contract with the DEMR performed the specific gravity test on the core samples (see Appendix 1 for the summary of the drill hole information - the orginal data may be found at http://snake1.cr.usgs.gov/demr/niemr/geochem/tables/annetlst.htm).

Each drill core sample was tested for elemental and whole rock analysis by Chemex Laboratories. Whole rock analysis (see Appendix 2) and 32 element inductively coupled plasma (ICP) tests were performed on the drill core samples. The orginal data may be found at http://snake1.cr.usgs.gov/demr/niemr/geochem/tables/annetlst.htm). Data gathered from lab testing of samples is used to determine both suitability of the rock for aggregate use and any impacts that may occur from further operations. Table 1 is an overall summary of the drill hole data for the two phases of drill and overall project averages.

The Tribe has completed a detailed topographic survey using global positioning systems (GPS) surveying equipment. The survey has produced a more detailed topographic terrain model of the BRAP area to be used during the creation of a Mine Model, as well as pinpointing all the drill sites.

Testing of the drill core received from the initial phase of drilling has yielded acceptable results for construction materials. The highest quality rock appears to be located in the center of the project area.

Table 1. Summary of the drill hole data

PHASE II AVERAGES

Percent Loss at 500 Revolution	Uniform Hardness Ratio	Sodium Sulfate Soundness	Density
28.91%	0.233	2.09%	2.644

PHASE III AVERAGES

Percent Loss at 500 Revolution	Uniform Hardness Ratio	Sodium Sulfate Soundness	Density
25.3%	0.227	1.68%	2.650

TOTAL PROJECT AVERAGES

Percent Loss at 500 Revolution	Uniform Hardness Ratio	Sodium Sulfate Soundness	Density
26.4%	0.229	1.81%	2.647

Uniaxial Compressive Strength Test

Uniaxial compressive strength Test (UCS) was conducted on 55 samples (Appendix 3) to determine the unconfined compressive strength and elastic constants of the rock. The unconfined compressive strength is often used as design criteria when constructing erosion control structures and can be an important indicator in determining the overall strength of the rock. This test is particularly important in determining the rock's suitability for use as riprap, gabion fill, or jetty stone.

Summary values for the UCS test data are presented in Table 1. This table shows the maximum load and maximum compressive strength of each sample. Results from the UCS test vary from sample to sample of the same rock type. There are many factors that affect a rock's compressive strength, such as any type of discontinuity will likely cause failure to occur along that feature. Micro-fracturing, weathering, and alteration can also greatly effect a rock's performance

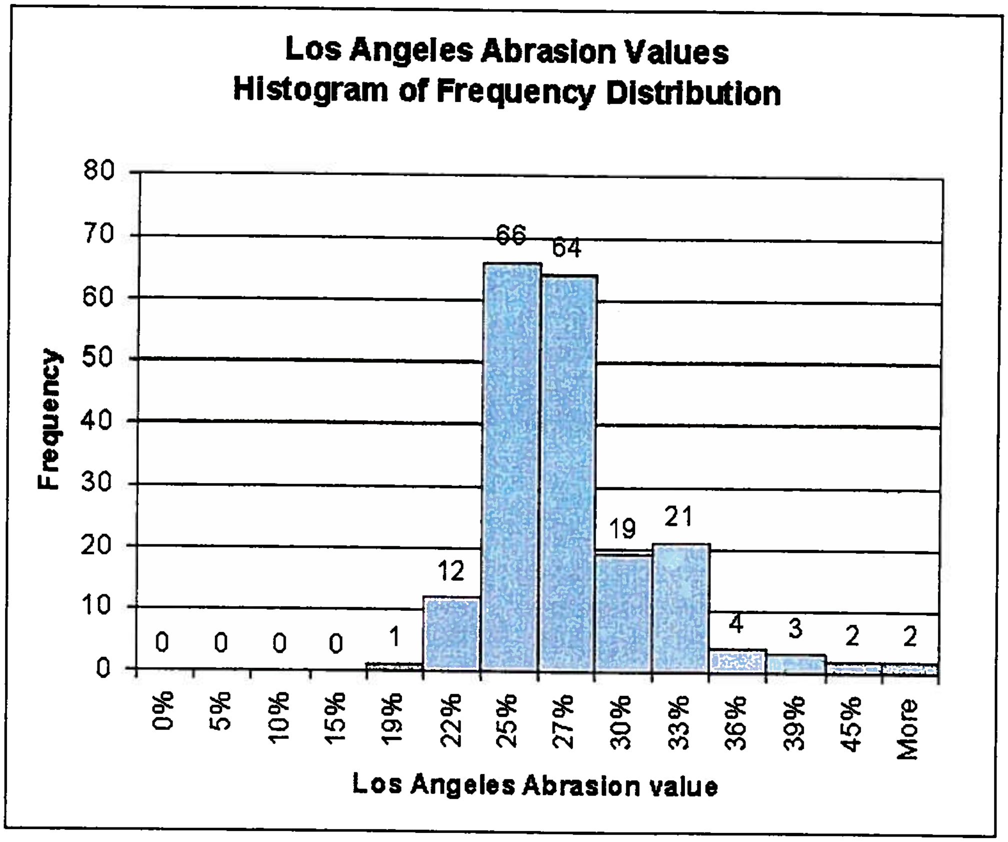
Test results for the UCS test varied greatly. Due to the many factors that can influence a rock's compressive strength, peak compressive stress varied from over 25 ksi to 2.3 ksi. The mafic dike yielded slightly higher compressive strength than the tonalite.

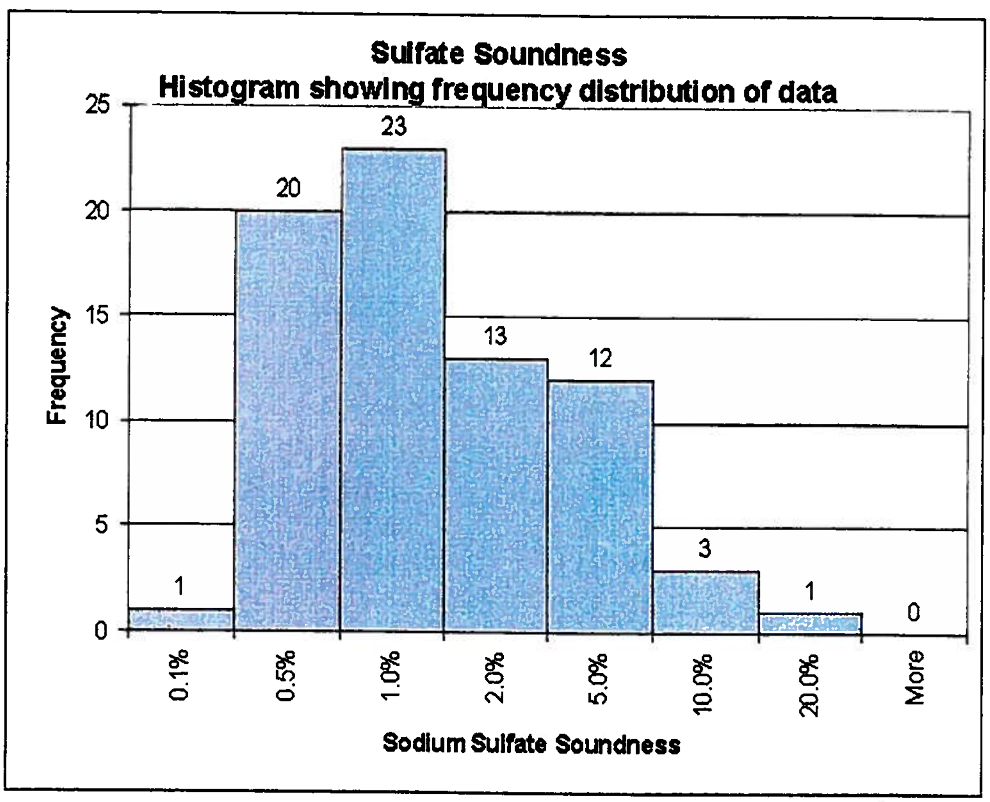
In appendix 3, the peak load, maximum compressive strength, as well as the mode of failure is listed. The primary failure experiences were due to structural controls. On several samples, shear and columnar failure occurred. Due to the high amount of failure do to structure, it can be said that the rock's compressive strength is primarily controlled by any structural discontinuities in the rock.

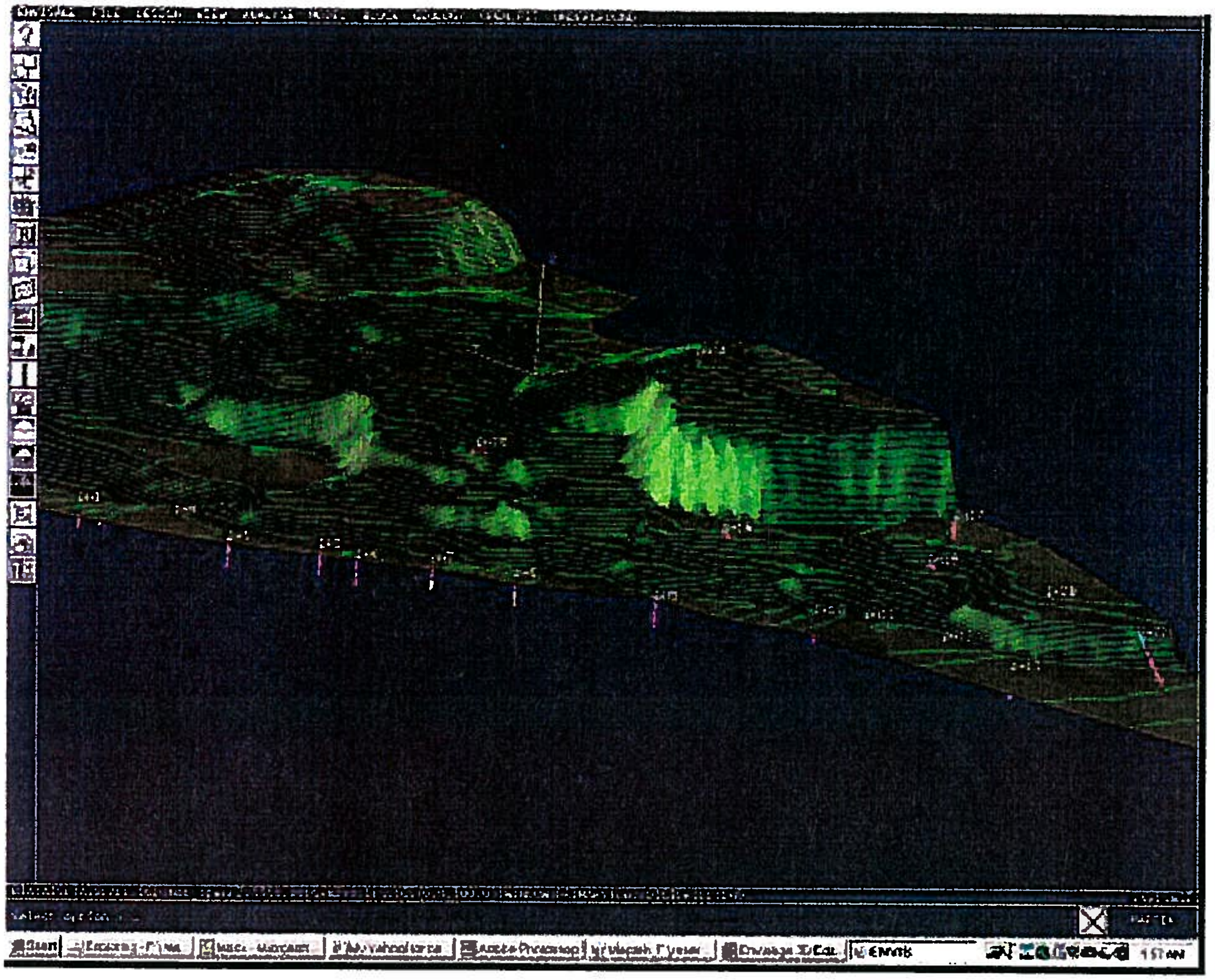
Some samples, such as the samples obtained from drill hole 20, exhibited a highly fractured pattern. This fracturing of the rock yielded considerably weaker compressive strength. If the tested rock mass was relatively discontinuity-free, the sample should fail by shear. Therefore, the samples that failed due to the shear failure, are more representative of an intact rock mass peak stress.

Table 2. Summary Data for UCS Tests

Project total	**Peak Load (lbf)**	**Comp. Strength (psi)**
Average	52,550.66	10,891.24
Max	122,061.70	25,066.33
Min	11,733.61	2,386.53
Std Dev	30,348.76	6,283.73
Median	43,163.27	8,856.80
Tonalite		
Average	51,238.99	10,649.21
Max	113,066.00	24,510.48
Min	11,733.61	2,386.53
Std Dev	28,112.19	5,866.97
Median	42,563.11	8,650.11
Mafic Dike		
Average	58,453.17	11,980.35
Max	122,061.70	25,066.33
Min	17,700.83	3,591.60
Std Dev	39,888.62	8,126.82
Median	46,122.74	9,359.94


Los Angeles Abrasion Values
Histogram of Frequency Distribution
Frequency
80
70
60
50
40
30
20
10
0
0 0 0 0 1 12 66 64 19 21 4 3 2 2
0% 5% 10% 15% 19% 22% 25% 27% 30% 33% 36% 39% 45% More
Los Angeles Abrasion value


Sulfate Soundness
Histogram showing frequency distribution of data
Frequency
25
20
15
10
5
0
1 20 23 13 12 3 1 0
0.1% 0.5% 1.0% 2.0% 5.0% 10.0% 20.0% More
Sodium Sulfate Soundness



Bald Ridge drill hole map with 3-D topography generated by Vulcan software

The BRAP is being modeled in three dimensions using Vulcan software. The following variables are being modeled using inverse distance squared: LA abrasion, sulfate soundness, density, and percent loss due to crushing. The block size used is 100 x 100 x 40 feet blocks. Data collected by the drill holes is being composited to 40 feet to match the potential mine bench height. A search radius of 1000 ft was used. The data used in the model creation is available for download and include:

- Topography model from USGS DEM files
- GPS data points to supplement the topographic map
- Tamgas Bay sounding data
- Field geologic mapping including preliminary fault identification and lineaments
- Access roads and drill roads
- Drill hole information and assays
- Location of streams
- Environmentally sensitive areas (i.e. eagles nests)
- Vulcan database and block model
- Air photo of project area
- ArcView GIS data (NAD 83, Alaska State Plane, Zone 1)

INDIAN MINERAL AGREEMENTS

The Metlakatla Indian Community may negotiate directly with mining companies under the authority of the Indian Mineral Development Act (IMDA) of 1982 (Appendix 4) and enter a joint venture, operating, production sharing, service, managerial, lease or other agreement. Three objectives will influence the Metlakatla Indian Community in the development of their mineral resources: (1) orderly and timely resource development, (2) environmental protection, and (3) minimal cultural impacts associated with their development. The Metlakatla Indian Community believes that with proper planning and oversight, mineral resource production from their lands can provide financial benefits to the community without detrimental effects to the environment or their culture.

The Metlakatla Tribe has completed four Environmental Assessments. Walden Point Road was completed in 1997, Tamgas Bay was competed in 1999, Bald Ridge Drilling project was completed in 1999 and the Forestry Management Plan will be completed in 2001. In a recent meeting with the approving government agencies it was decided that these reports contains Island-wide studies that may be used for the environmental studies on the Bald Ridge Area.

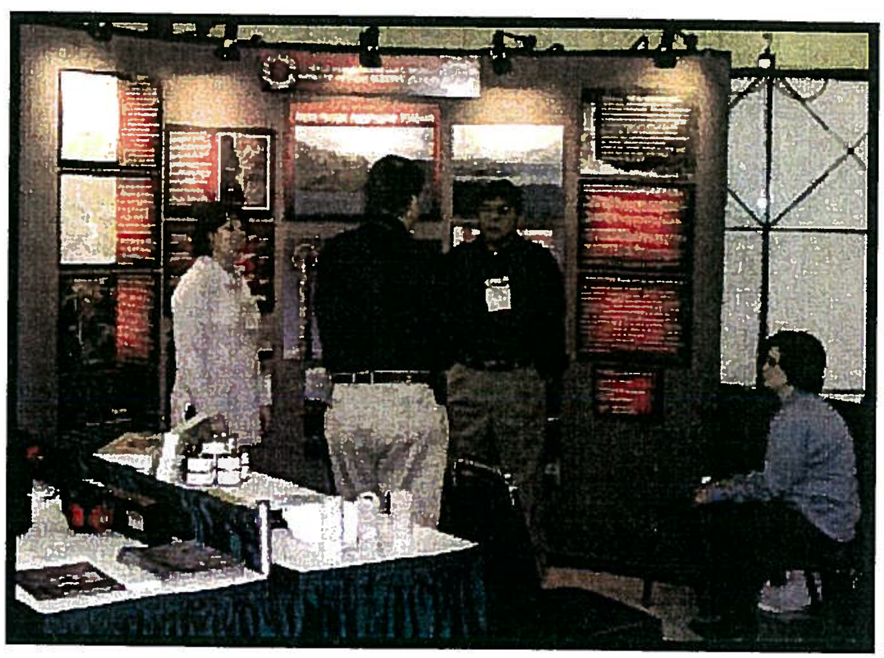
Statutory Authority

Mineral agreements and leases on the Annette Islands Reserve are authorized by The Indian Mineral Development Act of 1982 (IMDA), 96 Stat. 1938; 25 U.S.C. 2101-2108), and the Act of May 11, 1938 (52 Stat. 347; 25 U.S.C. 396a-g). The Metlakatla Indian Community will only consider IMDA agreements, which provides for direct negotiation with the Tribes themselves. The older Acts provide for the leasing of Indian mineral lands through competitive bidding. Negotiated leases under these Acts require a waiver from competitive bidding by the Assistant Secretary for Indian Affairs.

Regulatory Authority

The following Codes of Federal Regulations (CFR) apply to leasing of solid minerals on the Annette Islands Reserve:

- 25 CFR 211, Leasing of Tribal Lands for Mineral Development
- 25 CFR 216, Surface Exploration, Mining, and Reclamation of Lands
- 25 CFR 225, Oil and Gas, Geothermal, and Solid Mineral Agreements



Metlakatla Forestry Staff at Northwest Mining Conference discussing the Bald Ridge Project

Responsibilities of Government Agencies

Three Federal agencies have responsibilities in the administration of Indian mineral agreements, leases, and permits: Bureau of Indian Affairs, Bureau of Land Management, and Minerals Management Service. The general responsibilities of these agencies are summarized below:

Bureau of Indian Affairs

- Approves mineral agreements, leases, and permits.
- Maintains records for all mineral agreements, leases, and permits.
- Collects and distributes bonus and rental monies on non-producing mineral agreement contract lands and leases.
- Approves and maintains files on required surety bonds and corporate information.
- Cancels mineral agreements, leases, and permits.
- Performs economic analysis of IMDA's.

Bureau of Land Management

- Approves all exploration and mining plans involving Indian lands.
- Performs routine inspection of active mining operations for compliance with the Bureau of Land Management operating regulations, as well as, compliance with environmental requirements associated with the mining operations.
- Performs regularly scheduled production verification of minerals being mined from Indian lands in support of the Minerals Management Service royalty management activities.

Minerals Management Service

- Collects rents and royalties and accounts for monies owed and paid to Indian mineral owners on producing leases.
- Verifies production volumes associated with sales revenue.
- Collects Monthly Report of Operations from operators/companies.
- Performs routine audits of royalties and rentals paid to Indian mineral owners.
- Provides technical information on the royalty provisions of mineral agreements.

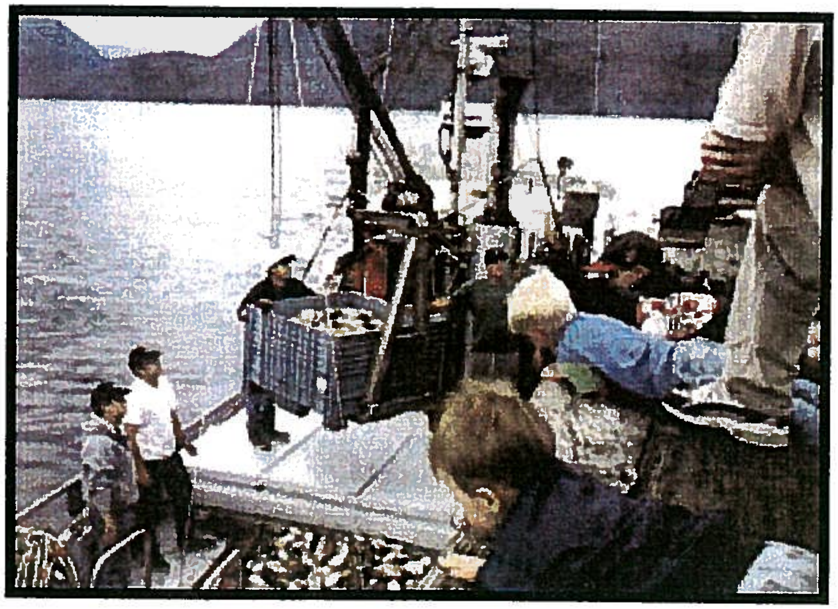
View of Upper Todd Lake on Annette Island

LABOR AVAILABILITY

Due to the recent closure of the Annette Hemlock Mill in addition with the decline in the timber and fishing industries which were the two primary sources of employment, a large labor driven work force is available to the BRAP Project. This provides the project with the necessary number of laborers needed.

Metlakatla has an unemployment rate of 50 to 80%, which is higher than most of the surrounding communities, largely due to its dependence on the timber and fishing industries. The community is striving to diversify its economy and improve the quality of life for all residents while maintaining sensitivity to its cultural values, land base, and environment.

Although the blue collar work force is readily available, training is needed to fill the white collar positions (upper management, engineers, geologists, etc.). The community plans on achieving this by offering scholarships and working co-ops which encourage community members to pursue careers in these fields.



Unloading geoducks at Annette Island Packing Plant

Training

A grant to provide eduction and employment has been applied for cooperatively by the Metlakatla Indian Community and the University of Alaska - Southeast Ketchikan Campus to the US Department of Labor Employment and Training Administration. The grant will provide pre-employment basic skills development, surface mining safety training, blasting and drilling courses, heavy equipment operation training, office skills, and accounting courses. The training will be a cooperative effort with several agencies including the University of Alaska, the Southeast Regional resources Center and the Mining and Petroleum Institute. This grant has been designed to train the Metlakatla work force for the BRAP project. Letters of support for this grant include the Governor of Alaska, Commissioner of Economic Development for Alaska, officials from the Bureau of Indian Affairs and Department of Labor.

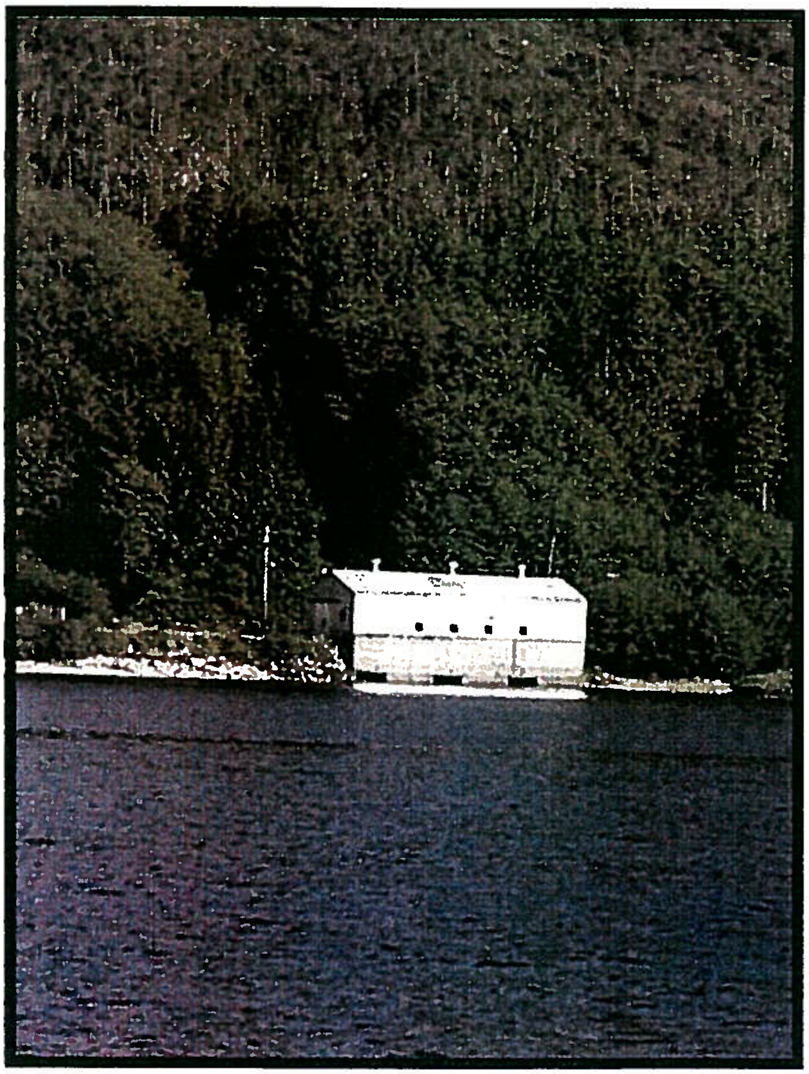
Fish Hatchery workers sorting salmon

ENERGY REQUIREMENTS

The Metlakatla Power and Light Company is owned and operated by the Metlakatla Indian Community. It is a stand-alone utility with two hydro generator plants, a diesel generator and an emergency battery standby system. The Chester Lake hydro generator is capable of producing 1042 KW per hour, and Purple Lake hydro generator is capable of producing 3900 KW per hour. The diesel generator on the Centennial Plant is capable of producing 3300 KW per hour, and the emergency standby diesel generator is capable of producing 1,865 KW per hour. The total capability of the Metlakatla Power and Light Company is 10,107 KW per hour.

Power usage for the community was 18,089 MWH for 1999. The largest customer was the Annette Island Hemlock Mill which consumed approximately 30% of the total net generation. Metlakatla Power and Light has one of the lowest cost per KWH in Alaska.

The Purple Lake hydro generator plant is conveniently located at the base of Bald Ridge, and will be able to supply the Bald Ridge Aggregate Project with a surplus of energy.



Purple Lake hydro-plant on the north side of the Project Area

THE METLAKATLA INDIAN COMMUNITY

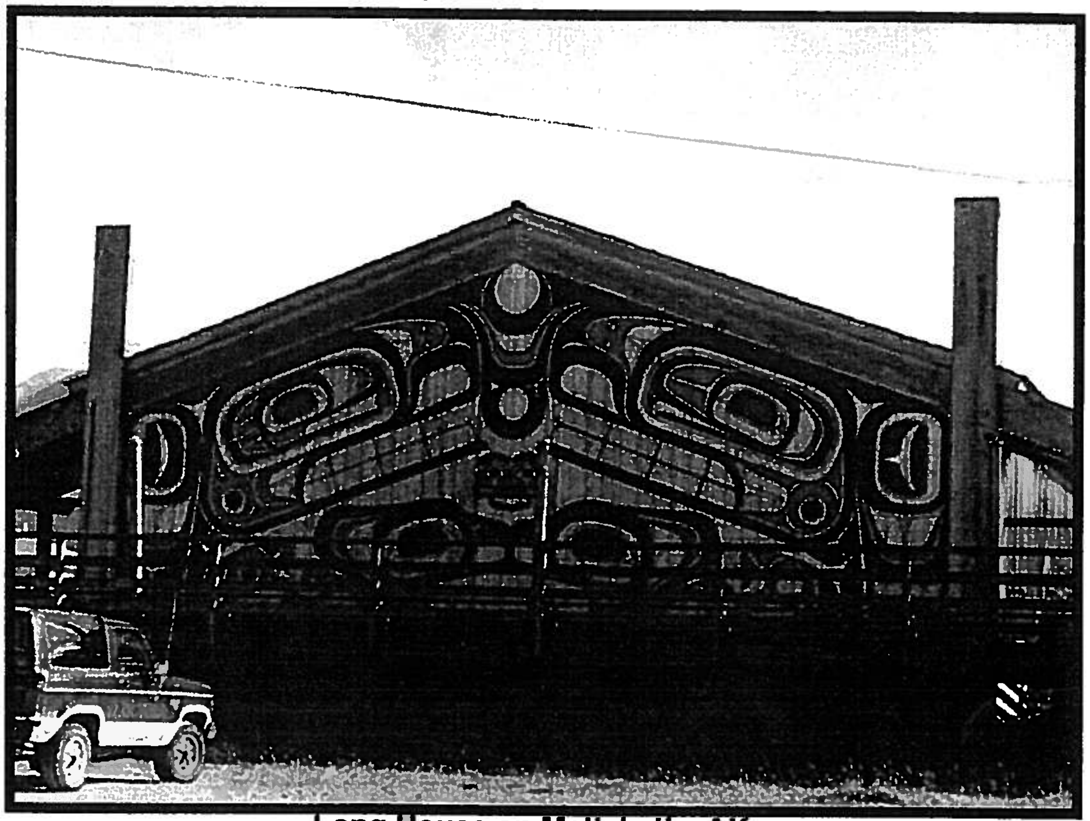
TRIBAL BACKGROUND

Metlakatla , which means "calm channel" in Tsimpshian, was founded in 1887 by Reverend William Duncan and Tsimpshian Indians who migrated from, "Old Metlakatla", British Columbia. The migration was the result of conflicts with Provincial Federation governments over land- claims and tribal sovereignty.

In 1891, the U.S. Congress formally recognized the new community by creating the Annette Islands Reserve, a Federal Indian Reservation. This action thereby set aside the Reservation for the exclusive use and occupancy by "Metlakatla Indians and other Natives of Alaska". Later, in 1916, the Reserve was enlarged by Presidential Proclamation to include the water surrounding Annette Islands for a distance of 3,000 feet. The community is a Federally recognized Indian Tribe, organized under the provisions of the Indian Reorganization ACT 25 USC, Section 426, with a Constitution and Bylaws approved by the Secretary of the Interior, on August 23, 1944. The Tribe is on the list of tribal governments covered by the Indian Tribal Governmental Tax Status Act. Also, the Community has the nonprofit status of State and Local government in the performance of its government functions.

The Annette Islands Reserve lies near the southern end of The Alexander Archipelago, a chain of hundreds of rugged, glacially carved islands interwoven with deep fjords and protected passages. The Reserve is located approximately midway in the inside passage between Seattle, Washington about 600 miles to the south and Skagway, Alaska which is 600 miles to the north.

Revillagigedo Channel separates the Reserve from the southeast Alaska mainland to the east, and from Ketchikan on Revillagigedo Island to the northeast. To the west is Nichols Passage, and farther west are the more open waters of Clarence Straits, the broad channel that cuts through



Long House on Metlakatla, AK

the southern half of southeast Alaska. Duke Island is visible to the south and beyond that Dixon Entrance, which opens to the Pacific Ocean.

Although the Reserve is approximately 17 miles long by 9 miles wide, the mountainous terrain of most of the Reserve, which rises from sea level to over 3,500 feet, limits settlement to the Metlakatla Peninsula, a low-lying southwest arm of the Reservation. On the peninsula, the topography is comparatively gentle, seldom exceeding 100 feet in elevation, with the exception of Yellow Hill. The Metlakatla Indian Community is located at the north end of the peninsula, on the shore of Port Chester. Further south on the peninsula is the former Coast Guard Air Station, Annette Islands Airport and adjoining facilities.

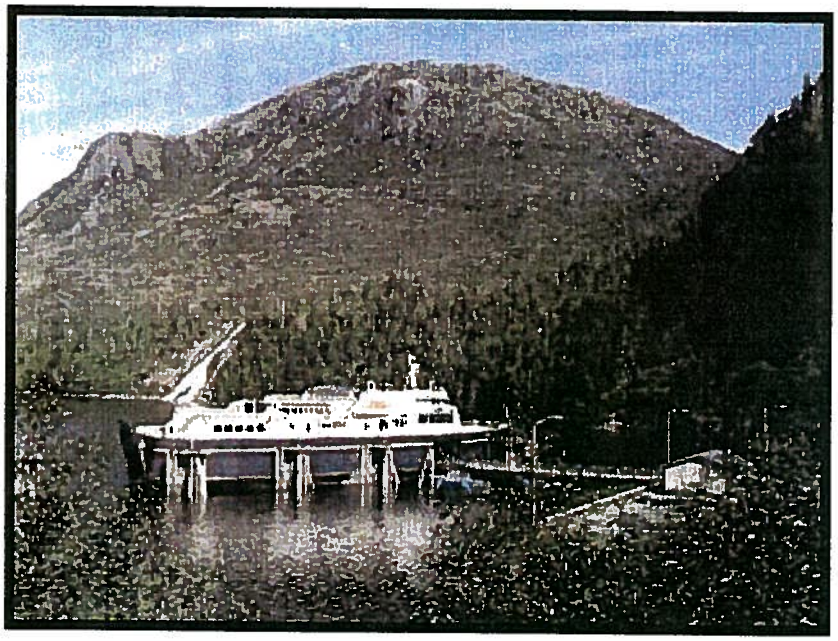
The Annette Islands Indian Reserve is a unique social and political entity. Its organization, legal and political environment within which it operates, weigh heavily on all development.

When congress was considering the Alaska Native Claims Settlement Act, Metlakatla was given an opportunity to end its reserve status and participate in the settlement with other Alaskan Natives. The settlement would have provided substantial payments of land and money to the community and its members in return for termination of Federal trust responsibilities. The community, however, through its attorneys and by a special delegation sent to the Congressional Committee considering the bill, requested that its Reserve status be kept intact and that the trust relationship between the Reserve and the United States Government continue. Thus the Metlakatla Indian Community was excluded from the provisions of the Alaska Native Claims Settlement Act (P.L. 92-203) as provided by Section 19 of the Act.

The Community has a unique relationship with the State of Alaska. The Community has a great deal of autonomy to determine the use of its own resources. For example, the Fishery Reserve adjacent to Annette Islands is managed for the benefit of the Community. State management plans and regulations are consulted, but the management decisions are left with the Community subject to the approval authority of the Secretary of the Interior, through the Bureau of Indian Affairs.

Throughout the years since its founding, the people of Metlakatla and the Annette Islands have become known as the most progressive and independent Native Community in Alaska. These qualities have been reflected in the community's way of thinking, development of resources and creation of a quality lifestyle.

In January, 1999 the Metlakatla Indian Community was designated as an Enterprise Community. The designation of an Enterprise Community brings with it multiple tax incentives that benefit outside businesses looking to venture into the Community. Some examples of these incentives are bonding ability, wage credits, tax exempt bonds, facility bonds, employment credits, welfare to work, work opportunity tax credits, and Indian employment tax credit.



Ferry facilities at Metlakatla, AK

POLITICAL STRUCTURE

The Metlakatla Indian Community of the Annette Islands Reserve is the local governing body. The Community is governed by a twelve (12) person Council. The Mayor, Secretary and Treasurer are elected by the general voting membership of the Community. Each of these are elected for a two (2) year term. The Council seats are staggered, resulting in the election of six (6) Council seats each year and three (3) executives every second year.

The Council organizes itself annually into six (6) standing committees including: Planning Committee, Lot Committee, Finance Committee, Health, Education and Welfare Committee, Law and Order Committee, and Natural Resource Committee.

The Council responsibilities include all of those associated with any tribal government related to health, safety, and the public welfare. Among these responsibilities are fire and police protection, water, sewer and garbage service, electric power, streets and roads. In addition to these traditional government responsibilities, the Council administers over $18 million in Federal and State grants and contracts which provide direct services to residents of the Reserve.

The leadership of the Community continues to pursue opportunities through proper planning and continues to establish the needed infrastructure to effectively manage and account these activities to its people. Income from the Community owned enterprises has been used to provide many public services. Hence, a strong sense of mutual commitment has evolved within the Community. This commitment has undoubtedly been a major factor in the Community's success.

Tribal Council Building at Metlakatla

CURRENT TRIBAL COUNCIL

Tribal elections are held every year with six (6) Council Members subject to election. New Council members are elected, or re-elected, depending on the vote. The members of the current Tribal Council are as follows:

Mayor Victor C. Wellington, Sr.
Secretary Judith A. Lauth
Treasurer Opal J. Hudson

Council Members:

Rachael S. Askren
Reginald Atkinson
Paul T. Brendible, Jr.
Richard Hudson, Sr.
Larry Hudson
Tim Gilmartin
Thomas F. Guthrie, Sr.
Leandro Guthrie, Sr.
Tom Lang, Sr.
Ted Littlefield, Sr.
Marcus S. Nelson
Louis Wagner, Jr.

SOCIOECONOMIC SUMMARY

- Total size: Annette Island is approximately 86,000 acres, Reservation including water rights is approximately 132,000 acres.
- The Metlakatla Indian Community is the only Federal Indian Reserve in the State of Alaska.
- The Annette Islands Reserve is composed of the Tsimpshian Tribe and other Alaskan Native Tribes.
- Metlakatla was founded in 1887.
- The Annette Islands Reserve was Federally recognized by the U.S. Congress in 1891.
- The Metlakatla Indian Community/ Annette Islands Reserve is governed by twelve (12) Tribal Council Members. They are elected to office by the majority of voting Tribal Members.
- The Metlakatla Indian Community provides a wide range of community services ranging from human and educational services to physical resource development.

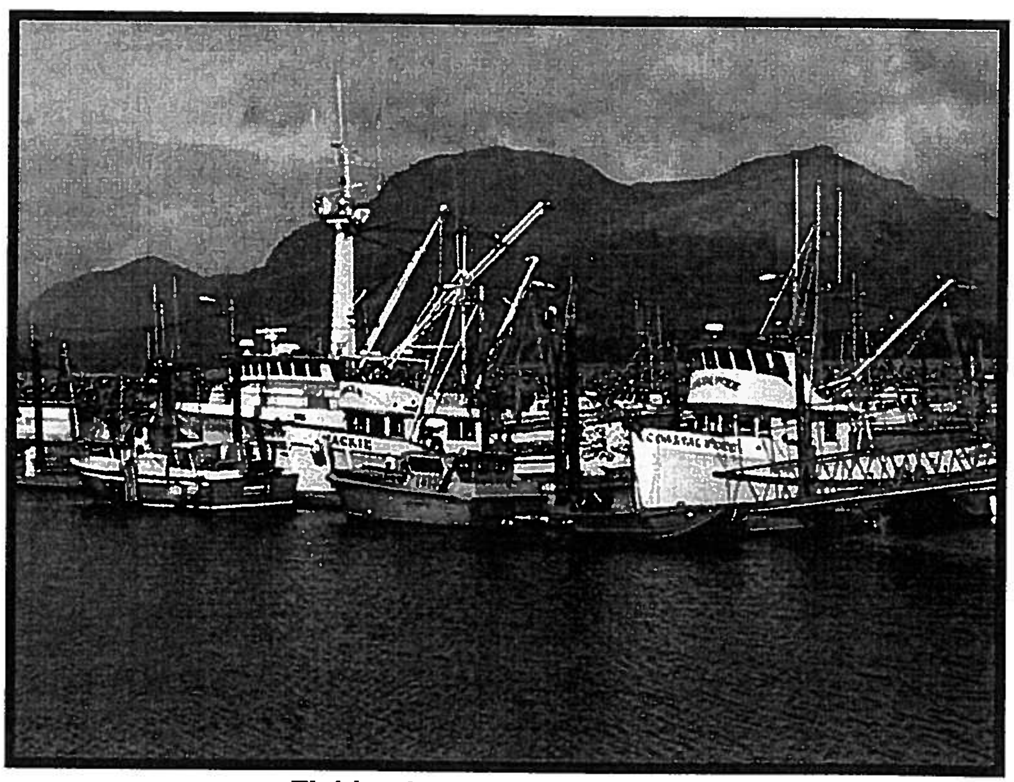
Population

The total Tribal enrollment is 2,430 of which 1,673 live on the Reserve. With an annual growth rate of just over 2%,

Physical Characteristics

Topography or elevation of the Reserve ranges from sea level to the highest peak of just over 3,500 feet. The Southwest section where the city of Metlakatla is located encompasses 17,121 acres which is predominantly noncommercial timber and muskeg. The elevation ranges from 0-100 feet with the exception of Yellow Hill being at 500 feet. The remainder of the reserve is mountainous terrain ranging from 0-3500 feet. This area provides the community with its commercial timber base.

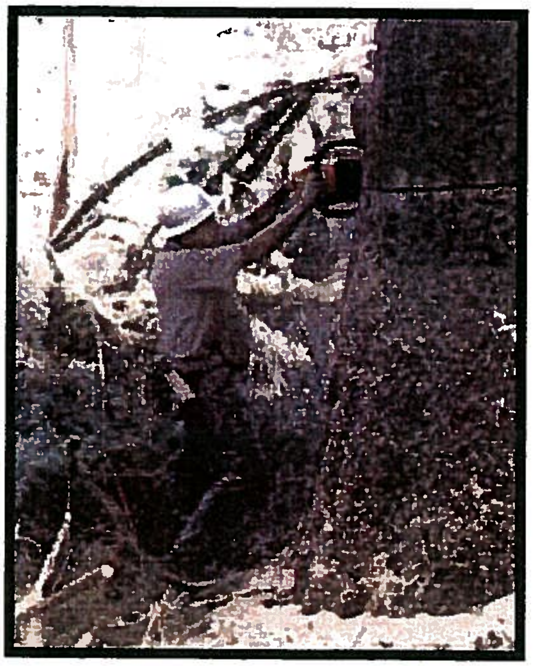
Climate: Metlakatla is in the maritime climate zone with warm winters, and cool summers. Average summer temperatures range from 36 to 65 degrees F. and from 28 to 42 degrees F. in the winter. Annual precipitation average is 115 inches. Some 200 inches of annual rainfall has been recorded in recent years.



Fishing boats at Metlakatla, AK

Resources and economy

Metlakatla is a Tsimpshian Community with a mixed economy, which includes a subsistence lifestyle. The dominant resources have been timber and fishing, but due to depressed markets in recent years,



Harvesting timber on Annette Island

the economy has shifted to other natural resource use. The MIC is looking to future development in bottled water and aggregate mining industries.

No state or local taxes exists on the Reserve. Metlakatla's economy is based on fishing and the wood products industry. The largest employer is MIC, which operates a major salmon hatchery in Tamgas Harbor, the Metlakatla Forest Products Mill, and local utilities and infrastructure services. MIC also operates a cold storage. The Annette Hemlock Mill was owned by Louisiana Pacific Corporation but the facility was vacated at the end of 1999. The Alaska Native Health Service (ANHS) operates the Family Medical Center, a dental program, and alcohol, drug abuse, and mental health programs. In the wake of the recent mill closure, the unemployment rate jumped from 5 percent to approximately 80 percent. Before the closure, median household income was approximately $37,000, with 10% of the residents below the poverty level; following the closure, those numbers have risen.

Metlakatla is aggressively pursuing opportunities to stabilize and expand its economic base, focusing on core community development. A bottled water plant is in the planning stages. Entry in the growing tourist industry is also taking place. The MIC Fisheries and Forestry departments are also involved in managing their respective resources for the long-term economic benefit of the community. Developing the Walden Point Road to facilitate transportation to Ketchikan and Saxman is a key feature of the communities' plan to improve the quality of life for its residents. In January of 1999, the Metlakatla Indian Community was selected as an Empowerment Zone, which will spurn community growth through a ten-year economic development plan, points toward grant applications, and $2.5 million.

Herring Fishermen on Annette Island

Taxes and Tax Benefits

The Mission of the Metlakatla Tribal Council is to promote the planned, orderly growth and development of the Annette Islands Reserve. The following strategies will be used to accomplish the mission:

- Promote a stable, reliable economic environment in which business can prosper and work to eliminate factors which unreasonably increase the cost and complexity of doing business on the Island.
- Promote development and implementation of a long-term fiscal plan that addresses the diverse needs of the Community
- Advocate a strong education system to insure a fully qualified Metlakatla workforce
- Encourage the development of Alaska's natural resources and expansion of in-state value-added processing of those resources in concert with modern principles of stewardship and sustained-yield management.

To this end the tax structure on Annette Island is

Federal	35% *
Corporate	none
Property	none
Mining	none
Sale	none

* If the tribe is the Majority in a Joint Venture, the deal may be structured so that no Federal taxes are paid on the production of the rock.

In January, 1999, the Metlakatla Indian Community was designated as an Enterprise Community (EC). A Two-Year Plan was adopted and implemented reflecting plans of the Community through the Planning Committee, Standing Committee, Council Annette Islands Reserve, Metlakatla, Alaska. The Planning Committee made the following recommendations to the Council:

- To stabilize local government revenues enough to maintain quality, essential tribal government services.
- To take action steps toward the promotion of industrial development opportunities and use of the Annette Islands Reserve's natural resources.
- To provide for the land needs (commercial, industrial, residential and recreational) of community expansion while still maintaining a quality environment.
- To provide quality utility services (water, sewer, solid waste, electric power) needed to accommodate population and economic growth and at the same time, to protect the public health and safety.
- To ensure that adequate housing is provided to accommodate population growth.
- To provide the necessary training and skills to enable Metlakatla Indian Community residents to participate in new or expanded economic activities.

As an ENTERPRISE COMMUNITY, Annette Island receives the following benefits to encourage business on the Reservation.

Indian Employment Tax Credit

The credit is calculated on wages (including employee health insurance costs) up to $20,000 for each employee. Provides business with an incentive to hire and retain individuals who are enrolled members of an Indian tribe who live on or near an Indian reservation.

Welfare to Work (WtW) Credit

Two year credit against Federal tax liability for business that hire long term welfare recipients. Credits up to $3,500 for the first year, and $5,000 for the second year for each new hire.

Work Opportunity Tax Credit (WOTC)

Credit up to $2,400 against Federal taxes for businesses for each new hire from groups that have high unemployment rates or other special employment needs: EZ youth ages 18 to 24, welfare recipients, ex-felons, 16 to 17 year old EZ resident summer hires.

Depreciation of Property Used on Indian Reservations

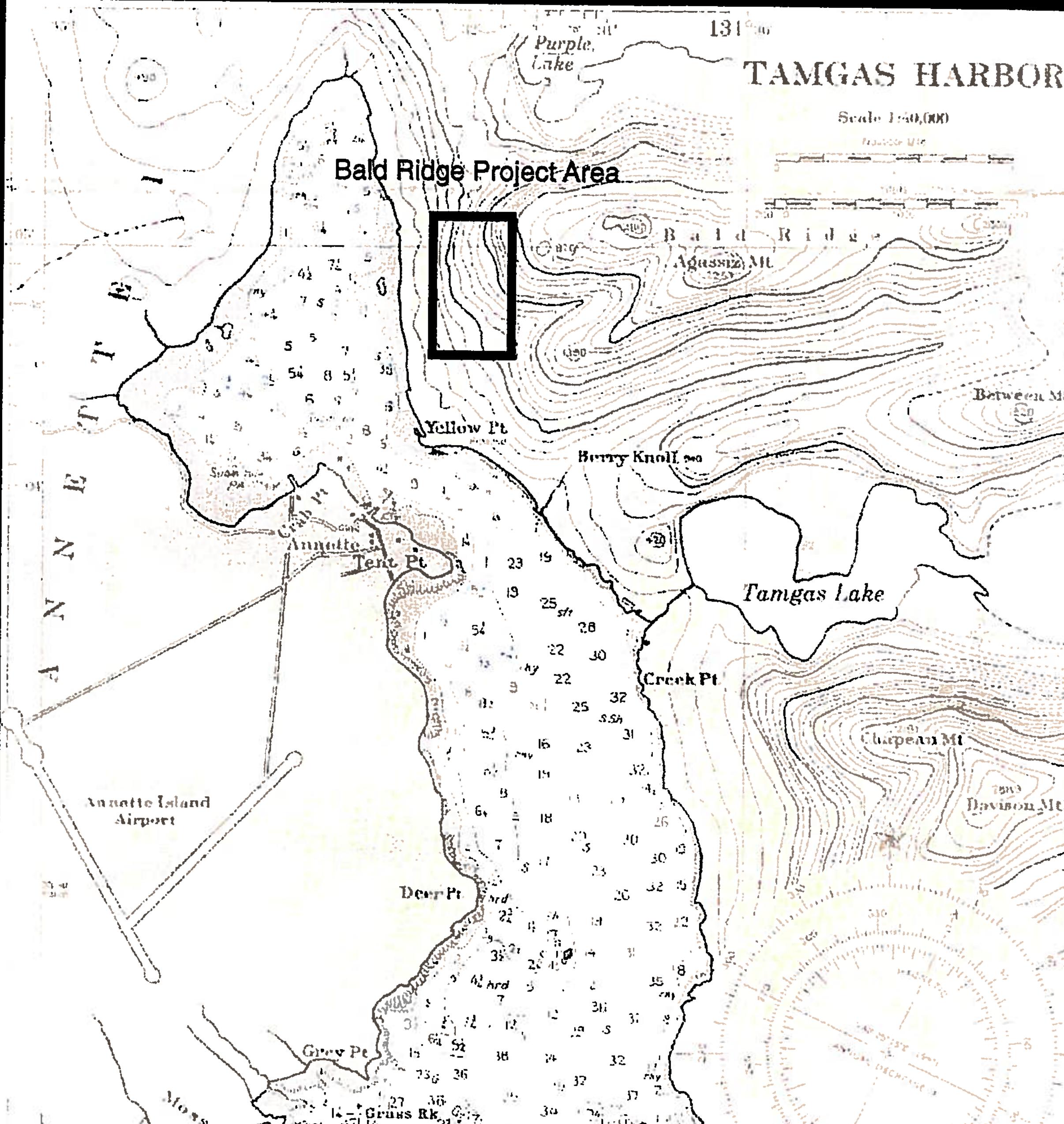
Special accelerated depreciation rules apply to qualified property placed in service on an Indian reservation after 1993 and before 2004. Shorter recovery periods to figure your depreciation deduction for qualified property result in a larger annual deduction.

For a more detailed discussion visit www.ezec.gov. Appendix 5 has Publication 954, "Tax Incentives for Empowerment Zones and Other Distressed Communities". This document contains a detailed description of the tax benefits, tax forms to use and other information.

The preliminary economics for the Bald Ridge project are very favorable for any company looking to invest in the project. For the economic model where the quarry produces 3 million tons per year, operating 250 days a year, has a cost of $7.60 per ton to mine and ship the rock to Seattle and using 35% Federal tax, gives a life of the mine in excess of 40 years. Selling the rock at $12 per ton produces a discount rate of 23.6%. For the same model, but structuring a joint venture so that the Tribe is clearly the operator and sellor of the rock, would eliminate the Federal Tax. The discount rate for this economic model is 31.7%. These discount rates do not reflect the status of the Tribe as an Empowerment Zone, which provides an operator a tax credit up to $25,000 per Indian employed.

Also as disadvantaged minority small business the tribe enjoys certain advantages when bidding projects that has Federal dollars attached to them.

Fireweed on Bald Ridge



The Bald Ridge Aggregate quarry will be located immediately adjacent to Tamgas Harbor, which is accessible from the southern end of the Annette Islands and provides excellent protection from weather. With a minimum depth of 5 fathoms in the projected route of a barge docking at the Bald Ridge Aggregate site, there are no foreseeable problems associated with barging the aggregate directly from the quarry site.

Surrounding Tamgas Harbor is the Tamgas Creek Fish Hatchery, the Tamgas apartments (where an old deep water port was located), a large, abandoned, paved airport, and a small boat launch ramp.

Appendix 1 - Summary of Drill hole information
Hole number/sample range, LA Abrasion, Uniform Hardness, Sodium Sulfate Soundness, Sample loss due to crushing and Density (g/cm2)

Original Data may be found at
http://snake1.cr.usgs.gov/demr/niemr/geochem/tables/annetlst.htm

APPENDIX 1

Hole number/sample range	LA Abrasion	Uniform Hardness	Sodium Sulfate Soundness	Sample loss due to crushing	Density (g/cm^2)
Vertical - collar 39 feet					
Hole 1-1 (16 to 40)	49.70%	0.331	11.65%	0.00%	2.650
Hole 1-2 (40 - 60)	28.80%	0.256	1.53%	0.10%	2.650
Hole 1-3 (60 - 80)	32.20%	0.217	0.82%	0.10%	2.450
Hole 1-4 (80 - 97)	25.80%	0.219	0.47%	0.10%	2.650
45 E collar 39 feet					
Hole 2-1 (0 to 20)	47.70%	0.253	0.78%	0.00%	2.500
Hole 2-2 (20-40)	35.40%	0.234	0.19%	0.10%	2.600
Hole 2-3 (40-60)	31.70%	0.229	0.61%	0.00%	2.600
Hole 2-4 (60-80)	39.10%	0.266	1.89%	0.10%	2.550
Hole 2-5 (80-100)	31.60%	0.222	0.57%	0.10%	2.600
Hole 2-6 (100-120)	35.70%	0.292	0.69%	0.10%	2.700
Hole 2-7 (120-137)	31.90%	0.225	0.35%	0.10%	2.600
Vertical - collar 80 feet					
Hole 3-1 (0 to 20)	32.20%	0.220	1%	0.40%	2.550
Hole 3-2 (20-40)	30.90%	0.229	0.90%	0.50%	2.600
Hole 3-3 (40-60)	26.90%	0.213	0.84%	0.30%	2.600
Hole 3-4 (60-80)	26.20%	0.220	0.34%	0.20%	2.600
Hole 3-5 (80-100)	29.20%	0.226	0.63%	0.20%	2.650
Veritcal - collar 71 feet					
Hole 4-1 (0 to 20)	32.90%	0.269	0.57%	0.30%	2.600
Hole 4-2 (20-40)	36.60%	0.235	0.42%	0.20%	2.750
Vertical - collar 83 feet					
Hole 5-1 (5 to 20)	32.50%	0.262	2.31%	0.20%	2.600
Hole 5-2 (20-40)	31.30%	0.242	3.31%	1.00%	2.600
Hole 5-3 (40-60)	34.20%	0.240	7.23%	0.80%	2.650
Hole 5-4 (60-80)	37.50%	0.234	1.75%	0.50%	2.550
Hole 5-5 (80-100)	44.40%	0.251	3.68%	0.80%	2.650
Vertical - collar 77 feet					
Hole 6-1 (0 to 20)	30.50%	0.225	1.15%	0.10%	2.660
Hole 6-2 (20-40)	31.50%	0.223	4.25%	0.30%	2.600
Hole 6-3 (40-60)	31.70%	0.224	2.83%	0.40%	2.710
Hole 6-4 (60-80)	38.30%	0.243	15.03%	1.00%	2.600
Hole 6-5 (80-100)	28.10%	0.264	7.58%	0.30%	2.590
Vertical - collar 95					
Hole 7-1 (4 to 20)	30.10%	0.228	1.74%	0.00%	2.730
Hole 7-2 (20-40)	25.20%	0.212	0.25%	0.10%	2.650
Hole 7-3 (40-60)	27.00%	0.220	0.34%	0.00%	2.590
Hole 7-4 (60-80)	24.30%	0.229	3.94%	0.00%	2.680
Hole 7-5 (80-100)	21.90%	0.225	4.97%	0.00%	2.700
Vertical - collar 85					
Hole 8-1 (3 to 20)	25.80%	0.216	4.49%	0.60%	2.620
Hole 8-2 (20-40)	25.85%	0.241	1.57%	0.30%	2.510
Hole 8-3 (40-60)	32.20%	0.216	1.54%	0.60%	2.630

APPENDIX 1 (con't)

Hole number/sample range	LA Abrasion	Uniform Hardness	Sodium Sulfate Soundness	Sample loss due to crushing	Density (g/cm²)
Hole 8-4 (60-80)	26.30%	0.236	3.96%	4.40%	2.650
Hole 8-5 (80-100)	22.50%	0.231	1.43%	0.30%	2.740
Vertical - collar 85					
Hole 9-1 (8.5 to 20)	26.30%	0.222	0.88%	0.70%	2.920
Hole 9-2 (20-40)	24.60%	0.239	0.75%	1.00%	2.600
Hole 9-3 (40-60)	25.20%	0.234	0.66%	1.10%	2.600
Hole 9-4 (60-80)	26.30%	0.261	0.34%	1.20%	2.680
Hole 9-5 (80-100)	28.80%	0.220	4.62%	0.80%	2.650
Vertical collar 119 feet					
Hole 10-1 (7 to 20)	22.70%	0.209	1.15%	1.00%	2.700
Hole 10-2 (20-40)	23.40%	0.211	0.64%	0.70%	2.700
Hole 10-3 (40-60)	21.40%	0.215	0.52%	0.70%	2.540
Hole 10-4 (60-80)	21.80%	0.214	0.15%	0.70%	2.640
Hole 10-5 (80-100)	22.80%	0.209	0.87%	0.70%	2.750
Vertical - collar 136 feet					
Hole 11-1 (12 to 40)	22.50%	0.210	0.22%	0.50%	2.650
Hole 11-2 (40-60)	21.30%	0.210	0.30%	0.60%	2.650
Hole 11-3 (60-80)	20.80%	0.212	0.10%	0.30%	2.650
Hole 11-4 (80-100)	20.50%	0.307	1.36%	0.70%	2.750
Vertical - collar 137 feet					
Hole 12-1 (20to 40)	23.50%	0.211	0.60%	0.20%	2.700
Hole 12-2 (40-60)	22.30%	0.217	1.10%	2.70%	2.650
Hole 12-3 (60-80)	25.50%	0.231	5.60%	5.00%	2.650
Hole 12-4 (80-100)	31.70%	0.239	2.40%	0.30%	2.650
Vertical - collar 111 feet					
Hole 13-1 (17 to 40)	22.60%	0.216	1%	6.30%	2.700
Hole 13-2 (40-60)	24.40%	0.225	1.40%	6.10%	2.650
Hole 13-3 (60-80)	24.70%	0.224	2.80%	2.90%	2.750
Hole 13-4 (80-100)	25.60%	0.225	0.53%	3.20%	2.600
Vertical - collar 84 feet					
Hole 14 not sampled					
45 NE - Collar 221					
Hole 15-1 (0-30)	26.30%	0.242	0.26%	0.30%	2.730
Hole 15-2 (30-60)	25.30%	0.239	0.27%	0.20%	2.570
Hole 15-3 (60-90)	27.40%	0.217	0.27%	0.20%	2.680
Hole 15-4 (30-60)	23.90%	0.208	0.17%	0.20%	2.660
Hole 15-5 (60-90)	26.00%	0.221	0.25%	0.30%	2.580
Hole 15-6 (90-120)	24.60%	0.227	0.52%	0.40%	2.720
Hole 15-7 (120-150)	22.70%	0.211	0.24%	0.40%	2.730
Hole 15-8 (150-180)	26.50%	0.217	0.93%	0.30%	2.660
Hole 15-9 (180-210)	25.40%	0.221	0.38%	0.40%	2.640
Hole 15-10 (210-240)	25.00%	0.219	0.41%	0.30%	2.640
Hole 15-11 (240-270)	26.50%	0.223	0.22%	0.30%	2.630

APPENDIX 1 (con't)

Hole number/sample range	LA Abrasion	Uniform Hardness	Sodium Sulfate Soundness	Sample loss due to crushing	Density (g/cm²)
45 SE - collar 221					
Hole 16-1 (0-30)	26.20%	0.228	0.93%	0.10%	2.560
Hole 16-2 (30-60)	27.30%	0.223	0.86%	0.20%	2.580
Hole 16-3 (60-90)	26.40%	0.241	1.16%	0.30%	2.710
Hole 16-4 (90-120)	26.00%	0.235	0.68%	0.40%	2.680
Hole 16-5 (120-150)	26.90%	0.223	0.38%	0.30%	2.480
Hole 16-6 (150-180)	23.70%	0.240	1.23%	0.60%	2.730
Hole 16-7 (180-210)	25.00%	0.232	1.17%	0.30%	2.650
Hole 16-8 (210-240)	24.50%	0.242	0.37%	0.40%	2.730
Hole 16-9 (240-270)	25.10%	0.231	0.86%	0.60%	2.610
Hole 16-10 (270-300)	24.70%	0.218	0.33%	0.30%	2.630
Hole 16-11 (300-320)	26.50%	0.241	0.25%	0.50%	2.550
Vertical - collar 304 feet					
Hole 17-1(0-40)	26.40%	0.249	1.65%	0.10%	2.610
Hole 17-2 (40-80)	24.20%	0.239	1.34%	0.50%	2.770
Hole 17-3 (80-120)	22.80%	0.226	0.51%	0.40%	2.780
Hole 17-4 (120-160)	26.70%	0.238	1.01%	0.20%	2.740
Hole 17-5 (160-200)	24.90%	0.215	0.37%	0.60%	2.500
Hole 17-6 (200-240)	24.20%	0.218	0.54%	0.60%	2.680
Hole 17-7 (240-280)	24.00%	0.214	0.24%	0.40%	2.510
Hole 17-8 (280-320)	21.20%	0.219	0.43%	0.50%	2.740
45 NE - collar 224 feet					
Hole 18-1(0-30)	30.10%	0.234	2.45%	0.0%	2.60
Hole 18-2 (30-60)	24.90%	0.235	0.61%	0.2%	2.63
Hole 18-3 (60-90)	25.70%	0.249	1.95%	0.0%	2.64
Hole 18-4 (90-120)	25.60%	0.238	1.07%	0.1%	2.49
Hole 18-5 (120-150)	22.50%	0.222	3.81%	0.1%	2.54
Hole 18-6 (150-180)	25.10%	0.226	2.07%	0.4%	2.60
Hole 18-7 (180-210)	22.40%	0.263	5.57%	0.2%	2.66
Hole 18-8 (210-140)	23.80%	0.276	4.22%	0.3%	2.71
Hole 18-9 (240-270)	18.70%	0.229	0.39%	0.2%	2.70
Hole 18-10 (270-300)	24.50%	0.221	0.68%	0.3%	2.67
Hole 18-11 (300-320)	25.30%	0.220	0.62%	0.5%	2.65
45 SE - collar 320 feet					
Hole 19-1(0-30)	26.10%	0.301	0.99%	0.4%	2.54
Hole 19-2 (30-60)	26.00%	0.230	0.76%	0.6%	2.63
Hole 19-3 (60-90)	27.00%	0.229	1.40%	0.7%	2.71
Hole 19-4 (90-120)	30.20%	0.189	1.11%	0.7%	2.59
Hole 19-5 (120-150)	23.80%	0.213	0.55%	0.4%	2.66
Hole 19-6 (150-180)	26.90%	0.233	2.62%	0.6%	
Hole 19-7 (180-210)	24.00%	0.224	0.68%	0.4%	2.60
Hole 19-8 (210-140)	23.70%	0.223	0.55%	0.7%	2.67
Hole 19-9 (240-270)	22.70%	0.222	0.42%	0.5%	2.64
Hole 19-10 (270-300)	25.70%	0.223	0.56%	0.4%	2.58
Hole 19-11 (300-320)	23.90%	0.223	0.32%	0.3%	2.62

APPENDIX 1 (con't)

Hole number/sample range	LA Abrasion	Uniform Hardness	Sodium Sulfate Soundness	Sample loss due to crushing	Density (g/cm²)
45 NE collar 244 feet					
Hole 20-1 (0- 30)	25.80%	0.215	1.92%	1.0%	2.64
Hole 20-2 (30-60)	31.10%	0.231	4.41%	0.4%	2.61
Hole 20-3 (60-90)	29.30%	0.243	2.68%	0.4%	2.55
Hole 20-4 (90-120)	30.80%	0.226	3.16%	0.3%	2.52
Hole 20-5 (120-150)	25.80%	0.238	1.67%	0.5%	2.54
Hole 20-6 (150-180)	26.30%	0.242	3.07%	0.2%	2.56
Hole 20-7 (180-210)	25.50%	0.235	3.60%	0.5%	2.60
Hole 20-8 (210-240)	23.30%	0.217	0.75%	0.8%	2.61
Hole 20-9 (240-270)	28.20%	0.224	1.54%	1.1%	2.65
Hole 20-10 (270-300)	28.80%	0.216	2.43%	0.9%	2.73
Hole 20-11 (300-320)	24.40%	0.219	0.61%	0.7%	2.59
45 SE collar 244					
Hole 21-1 (0-50)	26.70%	0.234	5.10%	0.5%	2.70
Hole 21-2 (50-80)	24.60%	0.220	1.63%	1.0%	2.67
Hole 21-3 (80-110)	25.10%	0.217	1.50%	0.7%	2.74
Hole 21-4 (110-140)	23.80%	0.214	9.20%	0.6%	2.69
Hole 21-5 (140-170)	29.40%	0.203	1.88%	0.8%	2.65
Hole 21-6 (170-200)	35.90%	0.272	10.92%	0.5%	2.79
Hole 21-7 (200-230)	25.60%	0.216	2.89%	0.4%	2.70
Hole 21-8 (230-260)	25.60%	0.231	4.26%	0.7%	2.63
Hole 21-9 (260-290)	22.30%	0.224	2.35%	0.6%	2.62
Hole 21-10 (290-320)	22.10%	0.217	2.18%	0.1%	2.60
Hole 21-11 (320-350)	23.10%	0.223	1.37%	0.1%	2.66
45 S collar 229					
Hole 22-1 (0-60)	22.70%	0.233	2.28%	0.7%	2.64
Hole 22-2 (60-90)	23.50%	0.250	3.06%	0.6%	2.57
Hole 22-3 (90-120)	22.10%	0.228	1.20%	0.6%	2.68
Hole 22-4 (120-150)	21.60%	0.247	0.92%	0.7%	2.63
Hole 22-5 (150-180)	22.00%	0.235	1.60%	0.3%	2.73
Hole 22-6 (180-210)	20.20%	0.235	0.79%	0.3%	2.75
Hole 22-7 (210-240)	24.60%	0.238	3.14%	0.3%	2.59
Hole 22-8 (240-270)	22.60%	0.231	2.03%	0.3%	2.67
Hole 22-9 (260-300)	21.40%	0.223	1.55%	0.4%	2.79
Vertical collar 78					
Hole 23 hole not sampled					
Vertical collar 550					
Hole 24-1(0-40)	27.00%	0.212	1.68%	0.5%	2.67
Hole 24-2 (40-80)	27.40%	0.212	4.61%	0.4%	2.59
Hole 24-3 (80-120)	22.10%	0.225	1.58%	0.5%	2.69
Hole 24-4 (120-160)	23.60%	0.231	2.74%	0.5%	2.69
Hole 24-5 (160-200)	24.90%	0.255	5.44%	0.4%	2.30
Hole 24-6 (200-240)	28.70%	0.246	6.11%	0.5%	2.78
Hole 24-7 (240-280)	31.80%	0.244	8.67%	0.4%	2.76
Hole 24-8 (280-320)	32.10%	0.279	10.60%	0.2%	2.71
Hole 24-9 (320-360)	22.30%	0.218	2.47%	0.4%	2.74
Hole 24-10 (360-400)	27.20%	0.220	2.16%	0.4%	2.60
Hole 24-11 (400-440)	24.70%	0.227	2.24%	0.4%	2.64

APPENDIX 1 (con't)

Hole number/sample range	LA Abrasion	Uniform Hardness	Sodium Sulfate Soundness	Sample loss due to crushing	Density (g/cm^2)
Hole 24-12 (440-480)	29.80%	0.237	1.91%	0.2%	2.67
Hole 24-13 (480-500)	25.30%	0.222	0.93%	0.4%	2.71
45 SE collar 550					
Hole 25-1 (0-60)	28.40%	0.228	3.19%	0.7%	2.67
Hole 25-2 (60-120)	25.90%	0.215	2.74%	0.7%	2.59
Hole 25-3 (120-180)	23.90%	0.207	2.31%	0.6%	2.73
Hole 25-4 (180-240)	23.30%	0.217	0.87%	0.7%	2.69
Hole 25-5 (240-300)	26.10%	0.225	1.00%	0.9%	2.70
Hole 25-6 (300-360)	24.50%	0.220	2.01%	0.8%	2.65
Hole 25-7 (360-420)	25.50%	0.220	1.18%	0.6%	2.74
Hole 25-8 (420-475)	26.70%	0.221	1.44%	0.6%	2.77
45 N collar 310					
Hole 26-1 (0-30)	25.10%	0.212	0.76%	0.5%	2.610
Hole 26-2 (30-60)	26.50%	0.200	0.70%	0.5%	2.660
Hole 26-3 (60-90)	26.10%	0.217	0.95%	0.2%	2.640
Hole 26-4 (90-120)	26.20%	0.225	3.38%	0.5%	2.610
Hole 26-5 (120-150)	24.00%	0.219	0.75%	0.8%	2.560
Hole 26-6 (150-180)	23.00%	0.213	0.51%	0.6%	2.770
Hole 26-7 (180-210)	25.30%	0.218	1.21%	0.3%	2.660
Hole 26-8 (210-240)	24.00%	0.220	0.59%	0.1%	2.660
Hole 26-9 (240-270)	22.30%	0.223	0.46%	0.3%	2.660
Hole 26-10 (270-300)	24.70%	0.209	0.80%	0.7%	2.530
Hole 26-11 (300-330)	25.20%	0.220	1.36%	0.6%	2.490
Hole 26-12 (330-360)	26.80%	0.224	1.88%	0.9%	2.540
Hole 26-13 (360-390)	27.70%	0.220	2.41%	0.6%	2.650
Hole 26-14 (390-420)	26.80%	0.219	1.95%	0.6%	2.620
Hole 26-15 (420-450)	24.90%	0.209	1.11%	0.7%	
45 E collar 310					
Hole 27-1 (0-30)	25.80%	0.210	0.69%	1.2%	2.660
Hole 27-2 (30-60)	26.20%	0.220	0.75%	0.8%	2.660
Hole 27-3 (60-90)	25.40%	0.220	0.68%	0.8%	2.740
Hole 27-4 (90-120)	25.00%	0.221	0.48%	0.7%	2.670
Hole 27-5 (120-150)	25.10%	0.223	1.49%	1.1%	2.650
Hole 27-6 (150-180)	24.20%	0.224	0.86%	1.2%	2.680
Hole 27-7 (180-210)	24.80%	0.222	0.56%	0.8%	2.620
Hole 27-8 (210-240)	25.30%	0.220	1.75%	1.2%	2.750
Hole 27-9 (240-270)	23.50%	0.214	1.07%	1.0%	2.680
Hole 27-10 (270-300)	24.10%	0.216	0.66%	0.8%	2.650
Hole 27-11 (300-330)	25.20%	0.214	0.75%	0.8%	2.600
Hole 27-12 (330-360)	24.20%	0.214	1.38%	0.4%	2.670
Hole 27-13 (360-390)	26.40%	0.223	0.96%	0.8%	2.690
Hole 27-14 (390-420)	21.30%	0.224	1.07%	0.5%	2.890
Hole 27-15 (420-450)	26.80%	0.211	2.53%	0.7%	2.720

Appendix 2
Whole rock analysis by ALS Chemex Laboratories.

Original Data for both the Whole Rock and Inductively Coupled Plasma (ICP) may be found at http://snake1.cr.usgs.gov/demr/niemr/geochem/tables/annetlst.htm

Appendix 2
Whole rock analysis

SAMPLE	Al2O3 (%)	CaO (%)	Cr2O3 (%)	Fe2O3 (%)	K2O (%)	MgO (%)	MnO (%)	Na2O (%)	P2O5 (%)	SiO2 (%)	TiO2 (%)	LOI (%)	TOTAL (%)
H01-1	15.36	2.89	0.01	3.25	0.94	2.16	0.06	6.69	0.05	65.31	0.30	3.41	100.45
H01-2	15.10	2.71	0.02	6.65	0.64	5.82	0.04	5.86	0.23	57.15	1.47	4.46	100.15
H01-3	15.72	0.39	0.01	1.18	0.81	0.70	<0.01	7.73	<0.01	72.43	0.14	0.68	99.79
H01-4	15.78	0.39	0.01	1.11	0.95	0.93	<0.01	7.48	<0.01	71.76	0.13	0.91	99.45
H02-1	15.71	0.36	<0.01	1.21	0.58	0.92	<0.01	8.09	0.03	72.10	0.15	0.88	100.05
H02-2	15.29	0.51	<0.01	1.05	0.99	0.79	<0.01	7.49	<0.01	72.01	0.14	1.14	99.41
H02-3	15.86	0.67	0.01	3.75	0.78	2.01	0.01	7.41	0.04	68.59	0.40	1.70	101.25
H02-4	15.41	0.52	0.01	4.31	0.65	4.11	0.01	6.43	0.07	62.95	0.57	2.59	97.63
H02-5	15.12	0.25	0.01	1.42	1.07	0.90	<0.01	7.57	<0.01	70.21	0.16	1.09	97.80
H02-6	15.77	0.39	<0.01	2.47	0.77	1.68	0.01	7.85	0.14	67.85	0.44	1.45	98.82
H02-7	15.35	0.33	<0.01	1.37	0.59	0.84	<0.01	7.94	0.06	69.90	0.13	1.05	97.56
H03-1	14.63	0.32	0.01	0.85	0.89	0.46	<0.01	6.91	<0.01	73.98	0.13	0.90	99.08
H03-2	15.73	0.44	0.01	1.28	0.65	1.38	<0.01	7.97	0.04	70.12	0.22	1.21	99.05
H03-3	15.62	0.24	<0.01	0.74	0.88	0.54	<0.01	7.38	0.01	72.86	0.12	0.83	99.22
H03-4	15.49	0.45	<0.01	0.78	0.85	0.47	<0.01	7.62	0.01	72.20	0.14	0.82	98.83
H03-5	15.77	0.44	<0.01	0.71	0.76	0.57	<0.01	7.96	0.01	71.15	0.13	1.00	98.50
H04-1	15.76	0.27	<0.01	1.84	0.72	1.06	<0.01	7.73	<0.01	71.61	0.14	1.11	100.25
H04-2	15.12	0.24	<0.01	1.51	0.76	0.86	<0.01	7.47	<0.01	71.27	0.13	1.06	98.42
H05-1	14.59	1.23	0.01	1.10	1.85	0.42	0.03	5.82	<0.01	72.20	0.13	2.07	99.45
H05-2	11.34	0.40	0.01	0.93	1.92	0.37	<0.01	4.12	<0.01	77.36	0.10	1.33	97.88
HO5-3	13.95	0.58	0.01	1.13	2.24	0.43	0.01	5.10	0.01	73.85	0.12	1.60	99.03
H05-4	13.65	0.82	0.01	1.02	1.93	0.36	<0.01	5.32	0.01	74.33	0.11	3.43	101.00
H05-5	13.62	0.73	<0.01	0.93	2.55	0.38	<0.01	5.06	0.01	74.47	0.11	1.79	99.65
H06-1	15.14	1.34	0.01	0.94	0.94	0.52	0.01	7.25	0.04	73.01	0.14	2.12	101.45
H06-2	14.55	1.39	0.01	0.92	0.73	0.69	0.01	7.30	<0.01	72.39	0.12	2.40	100.50
H06-3	14.48	1.46	0.01	1.22	0.84	1.26	0.02	6.95	0.08	70.65	0.17	2.37	99.51
H06-4	13.98	1.05	0.01	0.90	0.64	1.02	<0.01	7.18	0.05	73.70	0.15	1.94	100.60
H06-5	15.19	1.64	0.01	0.70	0.66	0.64	0.01	7.64	<0.01	70.34	0.11	2.19	99.13
H07-1	15.67	0.17	<0.01	0.51	0.60	0.66	<0.01	8.05	<0.01	71.45	0.12	0.93	98.16
H07-2	16.82	0.37	<0.01	0.74	0.85	0.76	<0.01	8.27	<0.01	71.32	0.13	1.10	100.35
H07-2A	15.82	0.42	0.01	0.95	1.00	0.75	<0.01	7.48	0.01	69.86	0.14	1.74	98.18

Appendix 2
Whole rock analysis

SAMPLE	Al203 (%)	CaO (%)	Cr203 (%)	Fe203 (%)	K20 (%)	MgO (%)	MnO (%)	Na2O (%)	P205 (%)	Si02 (%)	Tl02 (%)	LOI (%)	TOTAL (%)
H07-3	16.18	0.27	0.01	0.68	0.82	0.83	<0.01	7.83	0.03	71.16	0.13	1.23	99.17
H07-4	13.31	6.66	0.03	5.94	0.61	6.43	0.05	4.22	0.70	53.06	0.84	7.82	99.67
H07-5	13.90	6.87	0.03	7.05	0.94	5.24	0.04	4.33	0.17	51.04	0.77	7.50	97.88
H08-1	16.18	0.35	<0.01	1.00	1.11	0.64	<0.01	7.44	0.03	70.53	0.15	1.08	98.51
H08-2	16.99	0.76	<0.01	0.88	0.99	0.56	<0.01	8.64	0.05	68.34	0.14	1.27	98.62
H08-3	16.46	4.42	0.02	4.57	0.63	4.43	0.04	6.58	0.35	58.90	0.64	3.01	100.05
H08-4	14.03	10.05	0.03	10.13	0.35	8.30	0.09	3.24	0.72	46.17	1.74	5.98	100.85
H08-5	16.06	0.44	<0.01	1.05	0.67	1.55	<0.01	7.93	0.07	70.18	0.30	2.14	100.40
H09-1	15.83	0.61	<0.01	0.56	0.74	0.85	<0.01	8.01	0.01	71.57	0.14	1.39	99.71
H09-2	16.90	0.48	<0.01	0.64	1.03	1.00	<0.01	8.19	0.04	71.63	0.13	1.17	101.20
H09-3	16.16	0.49	<0.01	0.67	0.77	0.93	<0.01	8.40	0.01	70.87	0.14	1.17	99.61
H09-4	15.81	0.40	<0.01	0.87	0.73	0.95	<0.01	8.33	0.03	69.42	0.12	1.28	97.94
H09-5	16.32	0.94	<0.01	0.66	0.77	0.98	0.01	8.16	<0.01	70.16	0.13	1.51	99.64
H10-1	15.96	0.81	<0.01	1.06	1.18	0.93	0.01	7.14	0.06	72.25	0.13	1.49	101.00
H10-1A	16.19	0.97	<0.01	1.09	1.35	0.77	0.01	6.91	0.09	68.49	0.14	1.73	97.74
H10-2	16.43	0.60	<0.01	1.04	1.24	0.77	0.01	7.19	0.01	71.11	0.12	1.35	99.87
H10-3	16.01	1.22	<0.01	1.04	1.00	0.98	0.01	7.42	0.02	68.96	0.12	1.87	98.65
H10-4	16.29	1.07	<0.01	1.18	1.23	0.79	0.01	7.22	0.04	68.49	0.15	1.61	98.08
H10-5	16.94	0.93	<0.01	1.07	1.03	1.00	0.01	6.39	0.01	69.15	0.14	1.41	98.08
H11-1	16.35	0.78	<0.01	1.02	0.90	1.00	0.01	7.21	0.03	70.76	0.13	1.28	99.47
H11-2	16.48	1.00	<0.01	1.24	1.15	1.10	0.01	7.30	<0.01	69.38	0.14	1.67	99.47
H11-3	16.31	0.97	<0.01	1.22	0.98	1.38	0.01	7.60	0.05	69.89	0.14	1.72	100.25
H11-4	17.55	2.04	<0.01	2.91	1.35	2.16	0.06	6.73	0.05	63.37	0.24	3.22	99.68
H12-1	16.60	0.81	<0.01	0.49	1.05	0.30	<0.01	8.05	0.10	70.62	0.16	2.34	100.50
H12-2	15.68	2.12	<0.01	0.68	0.91	0.57	0.03	7.50	<0.01	71.12	0.17	2.43	101.20
H12-3	16.48	1.22	<0.01	0.74	1.02	0.48	0.01	7.97	<0.01	69.35	0.15	1.89	99.31
H12-4	15.15	2.00	<0.01	0.89	1.03	0.57	0.03	7.10	0.11	70.09	0.24	2.55	99.76
H13-1	16.75	4.56	0.03	2.54	1.63	2.55	0.07	6.05	0.11	59.90	0.56	5.85	100.60
H13-2	15.60	2.46	0.01	0.74	1.16	0.61	0.03	7.44	0.09	67.04	0.34	2.93	98.45
H13-3	15.80	1.78	<0.01	1.29	1.60	0.81	0.03	6.14	0.07	68.55	0.16	3.06	99.29
H13-4	15.43	1.42	<0.01	1.08	1.65	0.67	0.02	6.11	0.02	69.36	0.15	4.05	99.96

Hole numbers 14 to 17 are still being processed

Appendix 2
Whole rock analysis

SAMPLE	Al2O3 (%)	CaO (%)	Cr2O3 (%)	Fe2O3 (%)	K20 (%)	MqO (%)	MnO (%)	Na20 (%)	P205 (%)	Si02 (%)	Ti02 (%)	LOI (%)	Total (%)
H18-S01	15.95	0.80	0.01	1.40	1.45	0.47	0.01	6.51	0.03	72.59	0.14	1.12	100.50
H18-S02	16.06	0.88	0.01	1.18	1.22	0.49	0.01	7.19	0.01	71.66	0.15	1.85	100.70
H18-S03	15.07	0.97	<0.01	1.12	1.45	0.57	0.01	6.49	<0.01	71.45	0.14	1.10	98.37
H18-S04	15.65	0.78	0.01	1.14	1.27	0.54	0.01	6.84	0.03	72.34	0.14	1.09	99.84
H18-S05	17.19	1.01	<0.01	1.45	2.43	0.63	0.01	5.79	0.05	69.00	0.16	3.26	101.00
H18-S06	14.93	1.99	<0.01	1.23	1.26	0.54	0.02	6.55	0.03	68.75	0.13	2.63	98.06
H18-S07	15.40	1.59	0.01	1.09	1.39	0.43	0.01	6.49	0.01	71.23	0.13	2.77	100.55
H18-S08	11.87	13.79	0.05	9.12	0.16	7.54	0.18	2.82	0.46	38.36	1.04	14.29	99.68
H18-S09	18.29	6.99	<0.01	7.90	2.31	2.83	0.16	4.05	0.07	50.34	0.49	6.03	99.46
H18-S10	18.03	8.69	<0.01	8.03	3.08	3.15	0.18	3.84	0.09	44.53	0.51	9.41	99.54
H18-S11	13.31	1.73	<0.01	1.59	0.76	0.57	0.03	6.36	<0.01	73.54	0.20	2.22	100.30
H18-S12	15.12	2.33	0.01	1.47	1.97	0.44	0.06	6.02	0.05	67.31	0.14	3.94	98.86
H18-S13	14.05	1.50	<0.01	2.42	1.74	0.64	0.03	6.10	<0.01	68.97	0.23	2.47	98.15
H18-S14	12.27	5.59	0.06	2.29	1.37	1.40	0.07	4.96	0.02	64.95	0.11	5.72	98.81
H18-S15	16.04	1.34	0.01	0.85	1.30	0.30	0.01	6.76	0.02	71.92	0.13	1.75	100.40
H18-S16	14.54	4.77	0.02	2.02	0.81	1.90	0.04	6.48	0.03	63.75	0.28	5.64	100.30
H19-S01	15.10	0.41	0.01	1.19	1.50	0.52	0.01	6.25	0.02	71.07	0.14	2.48	98.70
H19-S02	15.28	0.98	0.01	1.08	1.04	0.49	0.01	7.34	0.04	71.77	0.14	1.94	100.10
H19-S03	14.82	0.66	0.01	1.23	1.77	0.57	0.03	5.42	0.02	71.89	0.13	1.52	98.07
H19-S04	15.84	1.02	<0.01	1.20	2.11	0.61	0.03	5.43	0.03	70.97	0.14	2.99	100.35
H19-S05	14.66	1.53	0.01	1.05	1.31	0.50	0.02	6.60	0.03	72.01	0.14	2.65	100.50
H19-S06	15.23	1.73	0.01	1.29	1.19	0.57	0.03	6.93	<0.01	70.28	0.14	2.60	100.00
H19-S07	15.29	1.70	<0.01	0.98	1.11	0.43	0.03	6.83	0.01	70.18	0.14	2.02	98.72
H19-S08	15.22	1.28	0.01	1.36	1.46	0.69	0.05	6.24	0.01	70.81	0.12	2.18	99.43
H19-S09	12.76	1.12	0.01	0.75	0.71	0.42	0.03	6.30	0.03	74.87	0.10	1.38	98.48
H19-S10	15.73	1.81	0.01	1.19	1.21	0.44	0.02	7.34	<0.01	71.02	0.15	1.95	100.85
H19-S11	14.77	1.24	0.01	2.15	1.18	0.81	0.04	6.43	<0.01	69.31	0.16	2.06	98.16
H19-S12	14.88	1.40	<0.01	2.57	1.55	0.73	0.04	5.91	<0.01	69.08	0.16	2.32	98.64
H19-S13	14.78	0.73	<0.01	2.06	2.92	0.59	0.03	4.18	0.03	71.36	0.20	2.10	98.98
H19-S14	15.31	1.78	<0.01	1.62	2.14	0.69	0.04	5.36	0.02	68.67	0.15	2.91	98.69
H19-S15	14.96	2.07	0.01	1.37	1.45	0.44	0.04	6.21	0.05	69.55	0.13	2.47	98.75
H19-S16	16.15	1.49	<0.01	1.33	1.61	0.39	0.02	6.46	0.03	68.53	0.15	2.10	98.26
H20-S01	14.33	1.55	0.01	1.63	1.10	0.91	0.01	6.07	0.05	72.14	0.16	2.14	100.10
H20-S02	16.49	0.43	<0.01	1.57	1.58	0.79	0.02	6.41	0.04	70.74	0.17	1.68	99.92
H20-S03	14.44	0.24	0.01	1.19	1.08	0.61	0.01	6.29	0.03	74.10	0.12	1.31	99.43
H20-S04	16.59	2.28	<0.01	2.10	1.96	1.24	0.05	5.82	0.35	64.81	1.06	3.07	99.33
H20-S05	14.82	1.99	<0.01	1.62	2.04	0.92	0.04	5.34	0.04	68.65	0.15	3.43	99.04

Appendix 2
Whole rock analysis

SAMPLE	Al2O3 (%)	CaO (%)	Cr2O3 (%)	Fe2O3 (%)	K20 (%)	MqO (%)	MnO (%)	Na20 (%)	P205 (%)	SI02 (%)	TI02 (%)	LOI (%)	Total (%)
H20-S06	16.90	2.37	<0.01	1.25	2.41	0.73	0.03	5.87	0.03	64.14	0.21	4.09	98.03
H20-S07	15.09	1.44	0.01	1.32	1.61	0.74	0.03	6.29	0.01	71.61	0.15	2.59	100.90
H20-S08	12.97	3.62	<0.01	1.27	1.73	0.68	0.05	4.60	0.04	68.70	0.14	4.23	98.03
H20-S09	13.58	5.33	<0.01	1.87	1.17	1.00	0.08	5.47	0.11	65.00	0.43	6.03	100.05
H20-S10	12.06	9.52	0.04	3.65	1.25	2.39	0.15	3.82	0.18	57.53	0.40	9.67	100.65
H20-S11	16.61	1.03	<0.01	1.24	1.84	0.59	0.02	6.99	0.02	67.50	0.16	2.19	98.19
H20-S12	15.24	1.74	0.01	0.93	0.63	0.67	0.03	7.70	0.03	69.00	0.14	2.06	98.18
H20-S13	17.94	1.58	<0.01	3.33	1.91	2.91	0.04	6.11	0.34	60.00	0.41	3.55	98.12
H20-S14	16.75	1.37	<0.01	2.36	1.84	1.77	0.03	6.01	0.18	64.24	0.29	3.28	98.12
H20-S15	16.07	1.33	<0.01	1.29	1.68	0.67	0.03	6.45	0.03	68.57	0.15	2.14	98.41
H20-S16	17.79	0.57	<0.01	0.89	2.30	0.54	0.01	7.09	0.04	69.80	0.18	1.57	100.80
H20-S17	16.42	1.51	<0.01	1.62	1.60	1.01	0.03	6.69	0.11	69.06	0.15	2.33	100.55
H20-S18	15.48	1.77	<0.01	1.49	1.26	1.00	0.03	6.85	0.03	68.42	0.16	2.56	99.05
H21-S01	16.90	1.58	<0.01	1.32	2.12	0.83	0.03	6.32	0.05	67.23	0.17	2.74	99.29
H21-S02	18.12	1.27	<0.01	1.58	2.37	0.91	0.02	6.10	0.03	65.81	0.20	2.67	99.08
H21-S03	16.78	1.75	<0.01	3.19	1.88	2.05	0.06	5.40	0.07	65.85	0.23	3.59	100.85
H21-S04	16.61	0.60	<0.01	2.31	2.16	1.20	0.04	5.68	0.04	68.79	0.20	2.46	100.10
H21-S05	17.09	1.55	<0.01	0.99	2.09	0.58	0.03	6.56	0.04	68.61	0.18	2.45	100.15
H21-S06	16.69	0.93	<0.01	0.97	1.82	0.54	0.01	7.11	0.03	68.23	0.17	1.82	98.32
H21-S07	19.06	2.69	<0.01	0.70	0.95	0.43	0.05	9.56	0.04	63.18	0.17	3.07	99.90
H21-S08	15.36	0.26	<0.01	1.09	1.02	0.66	0.01	7.35	0.03	71.61	0.16	1.08	98.63
H21-S09	17.96	1.74	<0.01	3.91	2.04	1.88	0.06	6.22	0.25	62.20	0.41	3.06	99.73
H21-S10	14.95	1.43	<0.01	1.65	1.08	0.91	0.08	6.78	0.04	70.41	0.16	2.18	99.67
H21-S11	17.83	1.25	<0.01	1.69	1.24	1.12	0.05	7.53	0.03	65.63	0.19	2.18	98.74
H21-S12	17.52	2.88	<0.01	3.02	1.64	1.72	0.07	6.52	0.18	61.63	0.32	3.78	99.28
H21-S13	17.05	1.30	<0.01	1.08	1.86	0.59	0.03	6.46	0.03	69.26	0.18	2.03	99.87
H21-S14	17.05	2.19	<0.01	1.37	1.47	0.84	0.04	6.85	0.01	67.50	0.17	2.75	100.25
H21-S15	19.46	4.59	<0.01	1.48	1.20	0.92	0.06	8.34	0.03	59.73	0.19	4.46	100.45
H21-S16	17.69	1.08	<0.01	1.34	1.61	0.82	0.04	6.88	0.01	68.32	0.18	1.95	99.92
H21-S17	16.73	1.45	<0.01	1.32	1.28	0.53	0.03	7.03	0.04	69.27	0.17	2.02	99.87
H22-S01	15.21	3.57	<0.01	1.03	1.78	0.43	0.05	6.38	0.05	66.38	0.17	3.88	98.93
H22-S02	15.44	2.17	<0.01	1.44	1.74	0.58	0.05	5.79	0.02	68.77	0.16	2.99	99.15
H22-S03	16.29	4.13	<0.01	1.56	2.46	0.48	0.07	5.08	0.04	63.58	0.17	4.70	98.56
H22-S04	16.11	2.29	<0.01	1.41	1.07	0.63	0.04	6.82	0.02	68.28	0.14	2.80	99.61
H22-S05	16.76	2.31	<0.01	1.08	1.68	0.32	0.04	6.64	0.03	68.48	0.18	2.74	100.25
H22-S06	16.41	1.81	<0.01	1.17	2.16	0.55	0.03	6.23	0.04	66.83	0.17	2.82	98.22
H22-S07	14.53	4.54	<0.01	1.86	1.91	0.67	0.07	5.47	0.05	65.72	0.17	5.29	100.30

Appendix 2
Whole rock analysis

SAMPLE	Al2O3 (%)	CaO (%)	Cr2O3 (%)	Fe2O3 (%)	K20 (%)	MqO (%)	MnO (%)	Na20 (%)	P205 (%)	Si02 (%)	Ti02 (%)	LOI (%)	Total (%)
H22-S08	18.80	2.30	<0.01	12.44	2.14	4.28	0.13	2.89	0.31	49.13	3.08	5.25	100.75
H22-S09	14.17	6.87	0.01	3.82	1.51	2.40	0.12	4.04	0.14	59.37	0.69	7.42	100.55
H22-S10	13.78	4.97	<0.01	1.92	2.02	1.14	0.07	4.62	0.02	63.73	0.18	5.72	98.17
H22-S11	13.83	4.76	<0.01	2.38	2.04	1.67	0.08	4.28	0.09	62.90	0.45	5.83	98.31
H22-S12	16.59	1.81	<0.01	1.13	1.99	0.73	0.04	5.83	0.03	69.99	0.17	2.56	100.85
H22-S13	11.76	10.67	0.03	5.37	0.98	4.06	0.18	3.27	0.17	52.13	0.38	11.13	100.15
H22-S14	15.93	1.76	<0.01	1.17	1.23	0.81	0.03	6.78	0.04	69.00	0.15	2.50	99.40
H23-S01	13.38	1.27	<0.01	2.24	1.20	0.90	0.04	5.31	0.06	71.60	0.19	1.89	98.08
H23-S02	13.77	3.93	<0.01	5.49	0.68	2.44	0.09	4.18	0.14	61.48	0.57	6.99	99.76
H23-S03	14.64	3.74	<0.01	5.80	0.44	2.57	0.11	4.96	0.15	62.01	0.61	4.24	99.27
H23-S04	16.29	4.99	<0.01	7.76	0.29	3.29	0.13	4.94	0.17	55.15	0.76	4.43	98.20
H24-S01	15.22	0.45	<0.01	1.26	0.90	1.14	0.01	7.36	0.03	70.63	0.14	1.60	98.74
H24-S02	16.14	0.58	<0.01	0.53	0.56	0.67	0.01	8.46	0.03	71.58	0.15	1.09	99.80
H24-S03	17.17	2.17	<0.01	2.43	0.35	2.60	0.03	8.56	0.57	61.90	1.35	2.42	99.55
H24-S04	14.45	0.60	<0.01	0.61	0.39	1.02	0.01	7.67	<0.01	71.36	0.12	2.95	99.18
H24-S05	15.53	1.49	<0.01	0.58	0.94	0.67	0.02	7.71	0.03	68.92	0.14	1.98	98.01
H24-S06	13.38	6.72	0.13	7.35	1.11	9.32	0.06	4.16	0.05	48.40	0.44	8.23	99.35
H24-S07	11.79	5.30	0.18	7.07	0.43	10.27	0.05	2.58	0.07	52.60	0.53	8.57	99.44
H24-S08	14.80	2.86	0.08	6.69	0.80	6.80	0.03	5.98	0.05	55.00	0.30	4.75	98.14
H24-S09	17.54	0.71	<0.01	1.89	0.85	2.76	0.03	8.38	0.19	64.54	0.51	2.12	99.52
H24-S10	17.52	3.62	<0.01	3.86	0.91	2.67	0.02	8.00	0.56	58.40	1.27	3.68	100.50
H24-S11	16.18	1.47	<0.01	2.64	0.92	2.59	0.01	7.46	0.17	63.27	0.91	2.64	98.26
H24-S12	15.52	1.80	0.15	4.06	0.18	8.85	0.03	5.56	0.05	57.85	0.48	5.36	99.89
H24-S13	11.24	6.75	0.16	5.02	0.45	7.63	0.04	3.59	0.05	54.49	0.45	8.70	98.57
H24-S14	16.66	0.34	<0.01	2.34	0.32	3.56	<0.01	7.93	0.09	64.97	0.39	2.15	98.75
H24-S16	12.49	8.12	0.15	8.13	0.22	10.51	0.06	3.63	0.05	46.26	0.41	9.55	99.58
H24-S17	15.91	3.70	<0.01	2.00	0.12	3.12	0.03	8.42	0.31	59.40	0.57	6.69	100.25
H24-S18	15.64	2.70	<0.01	3.99	0.33	2.23	0.03	7.72	0.51	63.06	0.66	2.37	99.24
H24-S19	15.91	0.31	<0.01	1.00	0.97	1.27	0.01	7.76	0.04	69.50	0.14	1.40	98.31
H24-S20	16.28	0.65	<0.01	1.12	1.08	1.31	0.03	7.56	0.04	69.73	0.15	1.57	99.52
H24-S21	16.18	2.29	<0.01	1.31	0.35	2.08	0.03	8.36	0.05	64.89	0.16	3.04	98.74
H24-S22	16.17	4.71	<0.01	1.96	0.69	2.40	0.05	7.46	0.50	61.60	0.65	4.52	100.70
H24-S23	16.62	1.09	<0.01	0.79	0.90	0.83	0.02	7.95	0.03	71.00	0.16	1.43	100.80
H24-S24	15.61	0.62	<0.01	1.04	0.86	1.28	0.01	7.74	0.03	69.45	0.14	1.83	98.61
H24-S25	15.69	1.02	<0.01	0.89	1.01	0.62	0.01	7.51	0.03	70.03	0.14	1.53	98.48
H25-S01	16.76	0.69	<0.01	2.80	0.36	1.80	0.01	8.91	0.22	66.85	0.40	1.75	100.55
H25-S02	15.80	0.63	<0.01	0.85	1.02	0.94	0.02	7.41	0.04	69.00	0.13	1.95	97.79

Appendix 2
Whole rock analysis

SAMPLE	Al2O3 (%)	CaO (%)	Cr2O3 (%)	Fe2O3 (%)	K20 (%)	MqO (%)	MnO (%)	Na20 (%)	P205 (%)	Si02 (%)	Ti02 (%)	LOI (%)	Total (%)
H25-S03	17.72	0.83	<0.01	1.66	1.67	1.84	0.01	7.14	0.36	64.30	0.87	1.84	98.24
H25-S04	15.59	1.19	<0.01	0.84	0.98	0.79	0.01	7.62	0.03	69.56	0.14	1.90	98.65
H25-S05	16.04	1.16	<0.01	1.20	0.78	1.40	0.01	7.75	0.04	69.03	0.18	1.96	99.55
H25-S06	15.91	1.42	0.01	1.24	0.96	1.10	0.01	7.69	0.05	68.45	0.31	2.84	99.99
H25-S07	16.58	5.34	<0.01	5.20	0.73	2.76	0.05	6.33	0.28	57.00	0.53	3.47	98.27
H25-S08	17.33	8.49	<0.01	8.05	0.45	4.19	0.09	5.30	0.50	48.50	0.94	4.63	98.47
H25-S09	17.84	0.80	<0.01	1.91	0.63	2.47	0.02	8.94	0.11	63.37	0.27	2.06	98.42
H25-S10	15.61	0.95	<0.01	0.73	0.82	0.48	0.02	7.97	0.03	70.90	0.14	1.29	98.94
H25-S11	15.74	0.95	<0.01	0.81	1.21	0.57	0.01	7.46	0.03	70.00	0.15	1.58	98.51
H25-S12	15.32	1.95	<0.01	1.61	0.65	0.45	0.01	7.98	0.17	67.41	0.41	2.07	98.03
H25-S13	15.21	1.49	<0.01	1.61	0.92	0.86	0.01	7.45	0.08	69.00	0.24	1.47	98.34
H25-S14	15.55	1.33	<0.01	0.87	0.85	0.41	<0.01	7.75	0.02	69.72	0.13	1.49	98.12
H25-S16	14.83	2.06	<0.01	0.86	0.50	0.87	0.02	7.66	0.05	68.92	0.12	2.27	98.16
H25-S17	15.79	1.51	<0.01	1.06	1.23	0.47	0.01	7.10	0.03	69.00	0.12	1.85	98.17
H25-S18	15.70	3.25	<0.01	5.05	0.94	2.55	0.03	6.28	0.19	60.81	1.16	2.65	98.61
H25-S19	15.44	1.97	0.01	0.89	0.99	0.37	0.01	7.19	0.03	70.00	0.14	1.57	98.61
H25-S20	15.28	1.96	0.01	2.32	0.92	2.23	0.02	7.05	0.09	65.00	0.44	2.94	98.26
H25-S21	15.65	0.66	<0.01	0.96	1.34	1.03	<0.01	7.13	0.04	70.00	0.14	1.47	98.42
H25-S22	15.39	0.91	0.01	0.88	1.20	0.71	<0.01	7.04	0.03	70.15	0.13	1.57	98.02
H25-S23	15.44	1.80	<0.01	1.02	0.85	1.04	0.01	7.42	0.06	68.13	0.22	2.25	98.24
H25-S24	15.46	1.08	0.01	0.75	1.01	0.56	<0.01	7.59	0.03	70.00	0.13	1.55	98.17
H26-S01	15.57	0.22	<0.01	0.94	1.18	0.34	<0.01	7.04	0.02	72.00	0.14	0.81	98.26
H26-S02	15.60	1.03	<0.01	0.72	0.92	0.22	<0.01	7.54	0.05	71.00	0.14	1.13	98.35
H26-S03	15.48	1.14	0.01	0.85	0.98	0.45	0.01	7.45	0.03	70.00	0.14	1.52	98.06
H26-S04	16.29	0.96	<0.01	0.98	1.40	0.60	0.01	7.01	0.03	70.04	0.14	1.54	99.00
H26-S05	15.94	0.81	0.01	0.91	0.75	0.64	<0.01	8.34	0.02	70.38	0.16	1.26	99.22
H26-S06	15.70	0.90	0.01	0.88	0.73	0.73	0.01	7.53	0.04	70.82	0.14	1.48	98.97
H26-S07	17.90	1.69	<0.01	0.54	0.43	0.28	0.01	9.17	0.03	68.36	0.14	1.64	100.20
H26-S08	16.38	0.39	0.01	1.59	0.30	1.25	0.01	8.40	0.04	70.88	0.13	1.15	100.55
H26-S12	16.02	0.82	0.01	0.94	1.30	0.65	0.01	6.90	0.02	71.75	0.13	1.47	100.00
H26-S13	15.89	1.90	<0.01	1.16	1.04	0.27	0.01	6.89	0.03	70.11	0.13	1.56	98.99
H26-S14	—	—	—	—	—	—	—	—	—	—	—	—	—
H26-S15	16.12	1.03	0.01	0.79	1.02	0.61	0.01	7.27	0.04	71.38	0.14	1.65	100.05
H26-S16	15.70	0.76	<0.01	0.81	0.76	0.84	0.01	8.05	0.01	70.20	0.15	1.25	98.54
H26-S17	16.29	1.22	0.01	0.71	0.65	0.33	0.01	8.17	0.04	71.00	0.13	1.39	99.95
H26-S18	16.40	0.26	0.01	0.73	0.72	0.65	<0.01	7.93	0.05	73.10	0.14	0.78	100.75
H26-S19	18.58	0.36	<0.01	1.50	1.95	1.13	<0.01	6.72	0.04	66.00	0.18	2.00	98.46

Appendix 2
Whole rock analysis

SAMPLE	Al2O3 (%)	CaO (%)	Cr2O3 (%)	Fe2O3 (%)	K20 (%)	MqO (%)	MnO (%)	Na20 (%)	P205 (%)	Si02 (%)	Ti02 (%)	LOI (%)	Total (%)
H26-S20	15.16	0.51	0.01	0.90	0.93	0.41	<0.01	7.32	0.03	71.87	0.13	1.19	98.46
H26-S21	16.24	1.08	0.01	1.38	1.01	1.16	0.01	6.96	0.08	68.09	0.18	1.91	98.11
H26-S22	15.74	1.07	<0.01	1.10	0.95	0.61	0.01	7.45	0.04	69.83	0.13	1.63	98.56
H27-S01	15.61	1.35	0.01	1.17	1.45	0.55	0.01	6.55	0.04	69.33	0.15	1.80	98.02
H27-S02	16.13	0.64	<0.01	1.04	1.37	0.63	<0.01	7.32	0.04	69.50	0.13	1.31	98.11
H27-S03	15.93	1.20	<0.01	0.89	0.87	1.13	<0.01	7.31	0.03	69.86	0.13	1.75	99.10
H27-S04	15.03	2.36	0.01	0.86	0.59	0.98	0.01	7.29	0.03	70.43	0.13	2.40	100.10
H27-S05	15.73	1.35	0.01	0.95	1.30	0.53	<0.01	6.85	0.04	70.99	0.14	1.76	99.65
H27-S06	15.76	1.39	<0.01	1.00	0.74	0.58	0.01	7.80	0.02	71.88	0.13	1.58	100.90
H27-S07	15.80	2.99	0.01	1.23	1.17	0.33	0.01	6.88	0.03	69.50	0.12	2.85	100.90
H27-S08	16.07	1.44	0.01	0.85	0.97	0.42	0.01	7.55	0.03	71.77	0.13	1.54	100.80
H27-S12	15.30	1.63	<0.01	1.04	0.98	0.37	<0.01	6.94	0.03	72.08	0.12	1.19	99.68
H27-S13	15.71	0.85	0.01	0.87	1.16	0.92	<0.01	7.33	0.01	71.68	0.14	1.44	100.10
H27-S14	17.08	0.68	0.01	1.26	0.42	1.92	0.03	8.50	0.03	68.86	0.14	1.58	100.50
H27-S15	15.73	0.67	0.01	0.70	0.16	1.49	0.01	8.33	0.03	70.32	0.12	1.23	98.80
H27-S16	16.13	3.46	<0.01	6.96	0.38	5.60	0.01	6.12	0.19	56.50	1.23	4.28	100.85
H27-S17	16.61	0.40	0.01	0.87	0.44	1.55	<0.01	8.17	0.01	71.34	0.16	1.11	100.65
H27-S18	15.71	0.40	<0.01	0.81	0.92	1.01	0.01	7.50	0.03	71.66	0.15	1.13	99.33
H27-S19	18.67	0.49	<0.01	1.59	0.22	4.20	0.03	8.95	0.03	63.49	0.18	2.20	100.05
H27-S20	12.10	8.50	0.08	14.15	0.04	12.73	0.19	1.87	0.23	41.27	2.42	6.78	100.35
H27-S21	15.60	0.14	0.01	0.89	0.47	1.57	<0.01	8.50	0.03	70.12	0.13	1.01	98.47

Appendix 3

Summary test results for Uniaxial Compressive Strength Test
Performed by
Colorado School of Mines
under contract to the
Bureau of Indian Affairs,
Division of Energy and Mineral Resources

Summary test results for Uniaxial Compressive Strength Test

Sample	Rock Type	Peak Load (lbf)	Compressive Strength (psi)	Type of Failure
H02-1	Tonalite	34,733.28	7,115.60	Shear
H02-6	Tonalite	63,031.01	12,799.58	Shear
H03-3	Tonalite	67,508.16	13,763.66	Structural
H04-1	Tonalite	43,163.27	8,856.80	Shear
H07-1	Tonalite	40,824.68	8,263.76	Structural
H07-5	Mafic dike	27,048.33	5,527.92	Structural
H08-4	Mafic dike	44,901.70	9,132.68	Columnar
H09-5	Tonalite	25,178.83	5,117.10	Shear
H10-5	Tonalite	15,376.03	3,124.87	Columnar
H11-1	Tonalite	11,733.61	2,386.53	Structural
H13-1	Mafic dike	17,700.83	3,591.60	Structural
H15-1	Tonalite	57,001.71	12,521.76	Structural
H15-2	Tonalite	16,541.88	3,638.34	Columnar/ Structural
H15-3	Tonalite	106,153.70	23,290.12	Structural
H15-4	Tonalite	78,552.69	17,021.82	Columnar
H15-5	Tonalite	111,437.90	24,510.48	Shear
H16-1	Tonalite	57,098.29	11,655.27	Columnar
H16-2	Tonalite	87,527.66	17,809.61	Shear
H16-3	Tonalite	63,562.20	12,948.79	Shear
H16-4	Tonalite	25,868.68	5,278.37	Structural
H17-2	Mafic dike	100,586.60	20,425.92	Shear
H17-4	Tonalite	113,066.00	22,850.45	Shear
H17-6	Tonalite	33,677.81	6,811.65	Structural
H17-7	Tonalite	87,989.87	17,803.88	Shear
H18-4	Tonalite	45,074.17	9,153.12	Structural/ Columnar
H18-6	Mafic dike	26,455.06	5,374.32	Structural
H18-9	Tonalite	42,563.11	8,650.11	Structural
H19-3	Tonalite	34,077.93	7,514.08	Structural
H19-7	Tonalite	48,488.93	9,933.63	Shear
H19-10	Tonalite	37,485.79	8,306.93	Structural
H20-3	Tonalite	25,123.64	5,548.92	Columnar
H20-6	Tonalite	23,605.97	5,209.38	Structural
H20-7	Tonalite	45,798.51	10,098.43	Structural
H20-8	Tonalite	22,033.10	4,878.51	Structural
H20-9	Mafic dike	29,614.58	6,595.63	Structural
H20-11	Tonalite	30,897.71	6,801.52	Structural
H21-2	Tonalite	23,240.34	4,726.92	Structural
H21-6	Tonalite	40,900.56	8,338.86	Structural
H21-7	Tonalite	38,044.57	7,719.47	Structural
H21-10	Tonalite	34,229.69	6,956.51	Structural
H21-11	Tonalite	16,472.90	3,329.15	Structural

Sample	Rock Type	Peak Load (lbf)	Compressive Strength (psi)	Type of Failure
H22-1	Mafic dike	47,343.78	9,587.19	Structural
H24-3	Mafic dike	50,192.87	10,258.01	Columnar
H24-12	Tonalite	48,992.53	10,036.80	Shear/ Structural
H25-4	Tonalite	72,702.74	14,894.17	Structural
H25-7	Mafic dike	118,626.20	24,243.85	Structural
H26-4	Tonalite	39,638.13	8,062.11	Structural
H26-6	Tonalite	103,891.00	21,164.50	Columnar
H26-10	Tonalite	30,883.91	6,301.70	Structural
H26-15	Tonalite	83,933.54	17,112.49	Columnar
H27-2	Tonalite	93,184.45	19,074.83	Structural
H27-3	Tonalite	83,995.62	17,207.68	Structural
H27-7	Mafic dike	122,061.70	25,066.33	Shear
H27-11	Tonalite	69,784.66	14,365.43	Shear
H27-15	Tonalite	30,683.85	6,260.88	Structural

Appendix 4

Indian Mineral Development Act of 1982
Public Law 97-382
25 USC 2101
December 22, 1982

Indian Mineral Development Act of 1982
Public Law 97-382
25 USC 2101
December 22, 1982

Sec. 2101. Definitions
For the purposes of this chapter, the term -
(1) "Indian" means any individual Indian or Alaska Native who owns land or interests in land the title to which is held in trust by the United States or is subject to a restriction against
alienation imposed by the United States; (2) "Indian tribe" means any Indian tribe, band, nation, pueblo, community, rancheria, colony, or other group which owns land or interests in land title to which is held in trust by the United States or is subject to a restriction against alienation imposed by the United States; and
(3) "Secretary" means the Secretary of the Interior.

Sec. 2102. Minerals Agreements
(a) Authorization for tribes; approval by Secretary Any Indian tribe, subject to the approval of the Secretary and any limitation or provision contained in its constitution or charter, may enter into any joint venture, operating, production sharing, service, managerial, lease or other agreement, or any amendment, supplement or other modification of such agreement (hereinafter referred to as a "Minerals Agreement") providing for the exploration for, or extraction, processing, or other development of, oil, gas, uranium, coal, geothermal, or other energy or nonenergy mineral resources (hereinafter referred to as "mineral resources") in which such Indian tribe owns a beneficial or restricted interest, or providing for the sale or other disposition of the production or products of such mineral resources.
(b) Inclusion of individual holdings; approval by parties and Secretary Any Indian owning a beneficial or restricted interest in mineral resources may include such resources in a tribal Minerals Agreement subject to the concurrence of the parties and a finding by the Secretary that such participation is in the best interest of the Indian.

Sec. 2103. Secretary's determination on Minerals Agreements
(a) Time; enforcement the Secretary shall approve or disapprove any Minerals Agreement submitted to him for approval within (1) one hundred and eighty days after submission or (2) sixty days after compliance, if required, with section 4332(2)(C) of title 42 or any other requirement of Federal law, whichever is later. Any party to such an agreement may enforce the provisions of this subsection pursuant to section 1361 of title 28.
(b) Factors for consideration; extent of required study in approving or disapproving a Minerals Agreement, the Secretary shall determine if it is in the best interest of the Indian tribe or of any individual Indian who may be party to such agreement and shall consider, among other things, the potential economic return to the tribe; the potential environmental, social, and cultural effects on the tribe; and provisions for resolving disputes that may arise between the parties to the agreement: Provided, That the Secretary shall not be required to prepare any study regarding environmental, socioeconomic, or cultural effects of the implementation of a Minerals Agreement apart from that which may be required under section 4332(2)(C) of title 42.

(c) Prior notice of proposed finding; privileged information not later than thirty days prior to formal approval or disapproval of any Minerals Agreement, the Secretary shall provide written findings forming the basis of his intent to approve or disapprove such agreement to the affected Indian tribe. Notwithstanding any other law, such findings and all projections, studies, data or other information possessed by the Department of the Interior regarding the terms and conditions of the Minerals Agreement, the financial return to the Indian parties thereto, or the extent, nature, value or disposition of the Indian mineral resources, or the production, products or proceeds thereof, shall be held by the Department of the Interior as privileged proprietary information of the affected Indian or Indian tribe.
(d) Delegation; final action; appeal; burden on Secretary the authority to disapprove agreements under this section may only be delegated to the Assistant Secretary of the Interior for Indian Affairs. The decision of the Secretary or, where authority is delegated, of the Assistant Secretary of the Interior for Indian Affairs, to disapprove a Minerals Agreement shall be deemed a final agency action. The district courts of the United States shall have jurisdiction to review the Secretary's disapproval action and shall determine the matter de novo. The burden is on the Secretary to sustain his action.
(e) Nonliability of United States; continuing obligations where the Secretary has approved a Minerals Agreement in compliance with the provisions of this chapter and any other applicable provision of law, the United States shall not be liable for losses sustained by a tribe or individual Indian under such agreement: Provided, That the Secretary shall continue to have a trust obligation to ensure that the rights of a tribe or individual Indian are protected in the event of a violation of the terms of any Minerals Agreement by any other party to such agreement: Provided further, That nothing in this chapter shall absolve the United States from any responsibility to Indians, including those which derive from the trust relationship and from any treaties, Executive orders, or agreement between the United States and any Indian tribe.

Sec. 2104. Secretary's review of prior Minerals Agreements
(a) Time; criteria; notice of modifications; time for compliance; effect of noncompliance the Secretary shall review, within ninety days of December 22, 1982, any existing Minerals Agreement, which does not purport to be a lease, entered into by any Indian tribe and approved by the Secretary after January 1, 1975, but prior to December 22, 1982, to determine if such agreement complies with the purposes of this chapter. Such review shall be limited to the terms of the agreement and shall not address questions of the parties' compliance therewith. The Secretary shall notify the affected tribe and other parties to the agreement of any modifications necessary to bring an agreement into compliance with the purposes of this chapter. The tribe and other parties to such agreement shall within ninety days after notice make such modifications. If such modifications are not made within ninety days, the provisions of this chapter may not be used as a defense in any proceeding challenging the validity of the agreement.

(b) Review before promulgation of regulations; not Federal action the review required by subsection (a) of this section may be performed prior to the promulgation of regulations required under section 2107 of this title and shall not be considered a Federal action within the meaning of that term in section 4332(2)(C) of title 42.

Sec. 2105. Effect of other provisions
Nothing in this chapter shall affect, nor shall any Minerals Agreement approved pursuant to this chapter be subject to or limited by, sections 396a to 396g of this title, or any other law authorizing the development or disposition of the mineral resources of an Indian or Indian tribe.

Sec. 2106. Assistance to tribes or individuals during Minerals Agreement negotiations
In carrying out the obligations of the United States, the Secretary shall ensure that upon the request of an Indian tribe or individual Indian and to the extent of his available resources, such tribe or individual Indian shall have available advice, assistance, and information during the negotiation of a Minerals Agreement. The Secretary may fulfill this responsibility either directly through the use of Federal officials and resources or indirectly by providing financial assistance to the Indian tribe or individual Indian to secure independent assistance.

Sec. 2107. Regulations; consultation with Indian organizations; pending agreements
Within one hundred and eighty days of December 22, 1982, the Secretary of the Interior shall promulgate rules and regulations to facilitate implementation of this chapter. The Secretary shall, to the extent practicable, consult with national and regional Indian organizations and tribes with expertise in mineral development both in the initial formulation of rules and regulations and any future revision or amendment of such rules and regulations. Where there is pending before the Secretary for his approval a Minerals Agreement of the type authorized by section 2102 of this title which was submitted prior to December 22, 1982, the Secretary shall evaluate and approve or disapprove such agreement based upon section 2103 of this title, but shall not withhold or delay such approval or disapproval on the grounds that the rules and regulations implementing this chapter have not been promulgated.

Sec. 2108. Tribal right to develop mineral resources

Nothing in this chapter shall impair any right of an Indian tribe organized under section 16 or 17 of the Act of June 18, 1934 (48 Stat. 987), as amended (25 U.S.C. 476, 477), to develop their mineral resources as may be provided in any constitution or charter adopted by such tribe pursuant to that Act (25 U.S.C. 461 et seq.).

Appendix 5

Publication 954,
"A Tax Incentives for Empowerment Zones and Other Distressed Communities".

Department of the Treasury
Internal Revenue Service

Publication 954
(Rev. February 1999)
Cat. No. 20086A

Tax Incentives for Empowerment Zones and Other Distressed Communities

Get forms and other information faster and easier by:
COMPUTER
• World Wide Web ➤ www.irs.ustreas.gov
• FTP ➤ ftp.irs.ustreas.gov
• IRIS at FedWorld ➤ (703) 321-8020
FAX
• From your FAX machine, dial ➤ (703) 368-9694
See *How To Get More Information* in this publication.

Contents

Introduction

This publication is for business owners who want to find out whether they qualify for certain tax incentives. These incentives are intended to help empowerment zones, enterprise communities, and other distressed communities. A distressed community is any area whose poverty rate or other conditions cause any of these tax incentives to apply. The requirements for each tax incentive are different. The following paragraphs will help guide you in using this publication.

To find out whether your area has been designated as an empowerment zone or enterprise community, read the first section, *Empowerment Zones and Enterprise Communities.*

If you know that your area has been designated as an empowerment zone or enterprise community, skip the first section and begin by reading the first few paragraphs of each section of the publication. Then, read the details of the sections that apply to you.

If you know that your area has not been designated as a zone or community, you should still read the first few paragraphs of each section. Some of these incentives are available in distressed communities that have not been designated as either empowerment zones or enterprise communities. Read the details of the sections that apply to you.

Useful Items

You may want to see:

Publication

- ☐ **946** How To Depreciate Property

Form (and Instructions)

- ☐ **3800** General Business Credit
- ☐ **5884** Work Opportunity Credit
- ☐ **8844** Empowerment Zone Employment Credit
- ☐ **8845** Indian Employment Credit
- ☐ **8850** Pre-Screening Notice and Certification Request for the Work Opportunity and Welfare-to-Work Credits
- ☐ **8860** Qualified Zone Academy Bond Credit
- ☐ **8861** Welfare-to-Work Credit

Empowerment Zones and Enterprise Communities

The following sections describe current designations of empowerment zones and enterprise communities. These designations will generally remain in effect until the end of the 10th calendar year beginning on or after the date of designation.

Urban designations effective December 21, 1994. The Secretary of Housing and Urban Development (HUD) designated 65 urban enterprise communities. The Secretary has also designated parts of the following cities as urban empowerment zones.

1) Atlanta, GA (9.29 square miles).
2) Baltimore, MD (6.8 square miles).
3) Chicago, IL (14.33 square miles).
4) Detroit, MI (18.3 square miles).
5) New York City, NY (the Bronx and Manhattan; 7.6 square miles).
6) Philadelphia, PA/Camden, NJ (4.4 square miles).

Rural designations effective December 21, 1994. The Secretary of Agriculture (USDA) designated 30 rural enterprise communities. The Secretary has also designated the following rural empowerment zones.

1) The Kentucky Highlands (part of Wayne and all of Clinton and Jackson counties).
2) Mid-Delta, Mississippi (parts of Bolivar, Holmes, Humphreys, Leflore, Sunflower, and Washington counties).
3) Rio Grande Valley, Texas (parts of Cameron, Hidalgo, Starr, and Willacy counties).

District of Columbia Enterprise Zone (DC Zone). Effective January 1, 1998, parts of Washington, D.C. are treated as an empowerment zone. This treatment will remain in effect until the end of 2002.

Urban designations effective December 31, 1998. HUD has designated parts of the following cities as urban empowerment zones.

1) Boston, MA (about 6 square miles).
2) Cincinnati, OH (about 7 square miles).
3) Columbia/Sumter, SC (about 19 square miles).
4) Columbus, OH (about 14 square miles).
5) Cumberland County, NJ (about 4 square miles).
6) El Paso, TX (about 10 square miles).
7) Gary/East Chicago, IN (about 17 square miles).
8) Huntington, WV/Ironton, OH (about 10 square miles).
9) Knoxville/Knox County, TN (about 16 square miles).
10) Miami/Miami-Dade County, FL (about 13 square miles).
11) Minneapolis, MN (about 7 square miles).
12) New Haven, CT (about 5 square miles).
13) Norfolk/Portsmouth, VA (about 10 square miles).
14) Santa Ana, CA (about 4 square miles).
15) St. Louis, MO/East St. Louis, IL (about 14 square miles).

Rural designations effective December 31, 1998. USDA has designated the following rural empowerment zones.

1) Desert Communities Empowerment Zone, California (parts of Riverside county).
2) Steele-Griggs County Empowerment Zone, North Dakota (part of Griggs county and all of Steele county).
3) Oglala Sioux Tribe Empowerment Zone, South Dakota (parts of the Pine Ridge Indian Reservation).
4) Southernmost Illinois Delta Empowerment Zone, Illinois (parts of Alexander, Johnson, and Pulaski counties).
5) Southwest Georgia United Empowerment Zone, Georgia (parts of Crisp county and all of Dooly county).

Designations effective January 1, 2000. HUD has designated parts of the following cities as urban empowerment zones.

1) Cleveland, OH.
2) Los Angeles, CA.

More information. For more information, call HUD at **1-800-998-9999** or USDA at **1-800-645-4712.**

Or you can find out whether your area has been designated as an empowerment zone or an enterprise community by using the Internet address **www.ezec.gov.**

Empowerment Zone Employment Credit

The empowerment zone employment credit provides businesses with an incentive to hire individuals who both live and work in an empowerment zone. (Individuals who work in the DC Zone may live anywhere in the District of Columbia.) You can claim the credit if you pay or incur "qualified zone wages" to a "qualified zone employee." The credit can be as much as $3,000 per qualified zone employee each year.

CAUTION *You cannot claim this credit for a business you operate in one of the 15 urban or 5 rural zones whose designation was effective December 31, 1998.*

Qualified zone employee. A qualified zone employee is any employee who meets both of the following tests.

1) The employee performs substantially all of his or her services for you within an empowerment zone in your trade or business.
2) While performing those services, the employee has his or her main home within that empowerment zone (or within the District of Columbia, for services performed within the DC Zone).

Both full-time and part-time employees may qualify.

Nonqualified employees. The following individuals are not qualified zone employees.

1) An individual you employ for less than 90 days. However, this 90-day requirement does not apply in either of the following situations.
   a) You terminate the employee because of misconduct as determined under the state unemployment compensation law that applies.
   b) The employee becomes disabled before the 90th day. However, if the disability ends before the 90th day, you must offer to reemploy the former employee.
2) Certain related taxpayers.
3) Certain dependents.
4) Any 5% owner.
5) An individual you employ at any:
   a) Private or commercial golf course,
   b) Country club,
   c) Massage parlor,
   d) Hot tub facility,
   e) Suntan facility,
   f) Racetrack, or other facility used for gambling, or
   g) Store whose principal business is the sale of alcoholic beverages for off-premise consumption.
6) Any individual you employ in a farming trade or business if, at the close of the tax year, the sum of the following amounts is more than $500,000.
   a) The larger of the unadjusted bases or fair market value of the farm assets you own.
   b) The value of the farm assets you lease.

Qualified zone wages. Qualified zone wages are any wages you pay or incur for services performed by an employee while the employee is a qualified zone employee (defined earlier). Wages are generally defined as those wages subject to the Federal Unemployment Tax Act (FUTA) without regard to the FUTA dollar limit.

Also treat as qualified zone wages certain training and education expenses you pay or incur on behalf of a qualified zone employee.

The total amount of qualified zone wages (including training and education expenses treated as qualified zone wages) you can use to figure the credit cannot be more than $15,000 for each employee each calendar year.

Effect of welfare-to-work or work opportunity credit. Qualified zone wages do not include any amount you take into account in figuring the welfare-to-work credit or the work opportunity credit. In addition, reduce the $15,000 maximum qualified zone wages for each qualified zone employee by the amount of wages you use to figure either of those credits for that employee.

Amount of credit. The following tables show the rate you apply to the qualified zone wages you pay or incur during each calendar year listed. The tables also show the maximum credit you can claim each year for each qualified zone employee.

Table 1. Rate and Maximum Credit for Zone Designations Effective December 21, 1994

Year	Rate	Maximum Qualified Zone Wages	Maximum Credit
1994 – 2001	20%	$15,000	$3,000
2002	15%	15,000	2,250
2003	10%	15,000	1,500
2004	5%	15,000	750

For the District of Columbia Enterprise Zone, the rate is 20% and the maximum credit is $3,000 until the end of 2002.

Table 2. Rate and Maximum Credit for the Zones in Cleveland and Los Angeles

Year	Rate	Maximum Qualified Zone Wages	Maximum Credit
2000 – 2004	20%	$15,000	$3,000
2005	15%	15,000	2,250
2006	10%	15,000	1,500
2007	5%	15,000	750

Claiming the credit. Use ***Form 8844,*** *Empowerment Zone Employment Credit,* to claim this credit. Although the empowerment zone employment credit is a component of the general business credit, a special tax liability limit applies to this credit. Therefore, you figure the credit separately and never carry it to Form 3800, *General Business Credit.*

Effect on salary and wage deduction. In general, you must reduce the deduction on your income tax return for salaries and wages and certain education and training costs by the amount of your empowerment zone employment credit.

More information. For more information about the empowerment zone employment credit, see Form 8844.

Increased Section 179 Deduction

Section 179 of the Internal Revenue Code allows you to choose to deduct all or part of the cost of certain qualifying property in the year you place it in service. You can do this instead of recovering the cost by taking depreciation deductions over a specified recovery period. There are limits, however, on the amount you can deduct in a tax year.

You may be able to claim an increased section 179 deduction if your business qualifies as an "enterprise zone business." The increase can be as much as $20,000. This increased section 179 deduction applies to "qualified zone property" you place in service in an empowerment zone.

CAUTION *You cannot claim this increased deduction for a business you operate in an enterprise community.*

Enterprise zone business. For the increased section 179 deduction, a corporation, partnership, or sole proprietorship is an enterprise zone business for tax years beginning after August 4, 1997, if all of the following statements are true for the tax year.

1) Every trade or business of the corporation or partnership is the active conduct of a qualified business (defined later) within an empowerment zone. (This rule does not apply to a sole proprietorship.)

2) At least 50% of its total gross income is from the active conduct of a qualified business within a zone.

3) A substantial part of the use of its tangible property is within a zone.

4) A substantial part of its intangible property is used in the active conduct of the business.

5) A substantial part of the employees' services are performed within a zone.

6) At least 35% of the employees are residents of an empowerment zone. (This rule does not apply to businesses in the DC Zone.)

7) Less than 5% of the average of the total unadjusted bases of the property owned by the business is from:

   a) Certain financial property, or

   b) Collectibles not held primarily for sale to customers.

For a sole proprietorship, the term "employee" in (5) and (6) includes the proprietor.

Qualified business. A qualified business is generally any trade or business except one that consists primarily of the development or holding of intangibles for sale or license.

However, the rental to others of real property located in an empowerment zone is a qualified business only if the property is not residential rental property and at least 50% of the gross rental income from the real property is from enterprise zone businesses.

The rental to others of tangible personal property is a qualified business only if at least 50% of the rentals of the property are to enterprise zone businesses or zone residents. (To be a qualified business for tax years beginning before August 5, 1997, at least 85% of the rentals of the property had to be to enterprise zone businesses or zone residents.)

Also, a qualified business does not include any business listed earlier in item (5) or item (6) under *Nonqualified employees* in the *Empowerment Zone Employment Credit* section.

Qualified zone property. For the increased section 179 deduction, qualified zone property is any depreciable tangible property if all of the following are true.

1) You acquired the property after the zone designation is in effect.

2) You did not acquire the property from a related person or member of a controlled group of which you are a member.

3) Your basis in the property is not determined either by its adjusted basis in the hands of the person from whom you acquired it or under the stepped-up basis rules for property acquired from a decedent.

4) You were the first person to use the property in an empowerment zone.

5) At least 85% of the property's use is in an empowerment zone and in the active conduct of a qualified trade or business in the zone.

Buildings are qualified zone property, but they do not qualify for the section 179 deduction. Used property may be qualified zone property if it has not previously been used within an empowerment zone.

Special rule for substantially renovated property. Property will be treated as having met requirements (1) through (4), listed earlier under *Qualified zone property,* if you substantially renovate the property. Property is substantially renovated if, during any 24-month period beginning after the zone designation takes effect, your additions to the basis of the property are more than the greater of the following amounts.

1) 100% of the adjusted basis of the property at the beginning of the 24-month period.

2) $5,000.

Property used in developable sites. Property is not qualified zone property if substantially all of its use is in a developable site. A developable site is a site to which both of the following apply.

1) The site could be developed for commercial or industrial purposes.

2) The site was included in one of the 15 urban or 5 rural zones whose designation was effective December 31, 1998, under an exception for developable sites that allowed it to be excluded from the poverty rate requirement.

Section 179 deduction limits. There are limits on the amount you can deduct under section 179. The following sections explain how these limits are increased for certain qualified zone property placed in service by an enterprise zone business.

Maximum dollar limit. The total cost of section 179 property that you can deduct for a tax year generally cannot be more than the maximum section 179 dollar limit. However, if you place qualified zone property in service during the year this maximum dollar limit is increased by the smaller of the following amounts.

1) $20,000.

2) The cost of section 179 property that is qualified zone property you placed in service during the year.

The following table shows these maximum dollar limits.

Table 3. Maximum Dollar Limits

For Tax Years Beginning In:	Maximum Section 179 Dollar Limit	Maximum Dollar Limit With Qualified Zone Property
1997	$18,000	$38,000
1998	18,500	38,500
1999	19,000	39,000
2000	20,000	40,000
2001 – 2002	24,000	44,000
Years after 2002	25,000	45,000

These maximum dollar limits are reduced if you go over the investment limit (discussed next) in any tax year.

Investment limit. For each dollar of your business cost over $200,000 for section 179 property placed in service in a tax year, reduce the maximum dollar limit by $1 (but not below zero). However, take only one-half of the cost of section 179 property that is qualified zone property into account when reducing the maximum dollar limit.

Example. In 1998, your enterprise zone business placed in service qualified zone property costing $420,000. Your maximum dollar limit is $38,500. Because all of this property is qualified zone property, only $210,000 (50% of this cost) is used to figure the investment limit. Because $210,000 is $10,000 more than $200,000, you must reduce the maximum dollar limit of $38,500 by $10,000. If your taxable income is at least $28,500, you can claim a $28,500 section 179 deduction for 1998.

Recapture. The recapture rules of section 179 apply when qualified zone property is no longer used in an empowerment zone by an enterprise zone business.

More information. For more information about the section 179 deduction, see Publication 946, *How To Depreciate Property.* For more information about the increased section 179 deduction, see Internal Revenue Code sections 1397A, 1397B, and 1397C.

Tax-Exempt Bond Financing

State or local governments can issue enterprise zone facility bonds (a type of exempt facility tax-exempt bond) to raise funds to provide an "enterprise zone business" with "qualified zone property." At least 95% of the net proceeds from the bond issue must be used to finance:

1) Qualified zone property whose principal user is an enterprise zone business, and

2) Certain land used for a related purpose (for example, land where the business is located and a parking lot for customers and employees).

Tax-exempt bonds generally have lower interest rates than conventional financing.

TIP *Contact the appropriate state or local government agency to find out if this type of financing is available in your empowerment zone or enterprise community.*

Enterprise zone business. For tax-exempt bond financing, a corporation, partnership, or sole proprietorship is generally an enterprise zone business if all of the following statements are true for the tax year.

1) Every trade or business of the corporation or partnership is the active conduct of a qualified business (defined later) within an empowerment zone or an enterprise community. (This rule does not apply to a sole proprietorship.)

2) At least 50% (80% for bonds issued before August 6, 1997) of its total gross income is from the active

conduct of a qualified business within a zone or community.

3) A substantial part of the use of its tangible property is within a zone or community. (For bonds issued before August 6, 1997, at least 85% of the use of its tangible property must be within a zone or community.)

4) A substantial part of its intangible property is used in the active conduct of the business. (For bonds issued before August 6, 1997, at least 85% of its intangible property must be used in, and exclusively related to, the active conduct of the business.)

5) A substantial part of the employees' services are performed within a zone or community. (For bonds issued before August 6, 1997, at least 85% of the employees' services must be performed within a zone or community.)

6) At least 35% of the employees are residents of an empowerment zone or enterprise community. (This rule does not apply to businesses in the DC Zone.)

7) Less than 5% of the average of the total unadjusted bases of the property owned by the business is from:

   a) Certain financial property, or

   b) Collectibles not held primarily for sale to customers.

For a sole proprietorship, the term "employee" in (5) and (6) includes the proprietor. Also, a business located in a zone or community that would qualify if it were separately incorporated is treated as an enterprise zone business. For example, a business that is part of a national chain could qualify, providing it would meet the definition of an enterprise zone business if it were separately incorporated.

Qualified business. A qualified business is generally any trade or business except one that consists primarily of the development or holding of intangibles for sale or license.

However, the rental to others of real property located in an empowerment zone or enterprise community is a qualified business only if the property is not residential rental property and at least 50% of the gross rental income from the real property is from enterprise zone businesses.

The rental to others of tangible personal property is a qualified business only if at least 50% of the rentals of the property are to enterprise zone businesses or zone or community residents. (For bonds issued before August 6, 1997, at least 85% of the rentals of the property must be to enterprise zone businesses or zone or community residents.)

Also, a qualified business does not include any business listed earlier in item (5) or item (6) under *Nonqualified employees* in the *Empowerment Zone Employment Credit* section.

Relaxed requirements during start-up period. For bonds issued after August 5, 1997, a business will be treated as an enterprise zone business during a start-up period if both of the following apply.

1) It is reasonable, at the beginning of the start-up period, to expect the business to be an enterprise zone business by the end of the start-up period.

2) The business makes bona fide efforts to be an enterprise zone business.

The start-up period is the period that ends with the start of the first tax year beginning more than 2 years after the later of the following two dates.

1) The issue date of the bond issue financing the qualified zone property.

2) The date this property is first placed in service (or, if earlier, the date that is 3 years after the issue date).

Requirements during and after testing period. For bonds issued after August 5, 1997, a business that qualifies as an enterprise zone business at the end of the start-up period must continue to qualify during a testing period that ends 3 tax years after the start-up period ends.

After the 3-year testing period, a business will continue to be treated as an enterprise zone business as long as it meets an employee residency requirement. To meet this requirement, at least 35% of its employees must be residents of an empowerment zone or enterprise community. However, the following businesses are not treated as enterprise zone businesses even if they meet the employee residency requirement.

1) Any business that consists primarily of the development or holding of intangibles for sale or license.

2) Any business listed earlier in item (5) or item (6) under *Nonqualified employees* in the *Empowerment Zone Employment Credit* section.

A business in the DC Zone does not need to meet the employee residency requirement to continue to be treated as an enterprise zone business after the testing period.

Qualified zone property. For tax-exempt bond financing, qualified zone property is any depreciable real or tangible personal property if all of the following are true.

1) You acquired the property after the zone or community designation is in effect.

2) You did not acquire the property from a related person or member of a controlled group of which you are a member.

3) Your basis in the property is not determined either by its adjusted basis in the hands of the person from whom you acquired it or under the stepped-up basis rules for property acquired from a decedent.

4) You were the first person to use the property in an empowerment zone or enterprise community.

5) At least 85% of the property's use is in an empowerment zone or enterprise community and in the active conduct of a qualified trade or business in the zone or community.

Used property may be qualified zone property if it has not previously been used within an empowerment zone or enterprise community.

Special rule for substantially renovated property. Property will be treated as having met requirements (1) through (4), listed earlier under *Qualified zone property,* if you substantially renovate the property. Property is substantially renovated if, during any 24-month period beginning after the zone or community designation takes effect, your additions to the basis of the property are more than the greater of the following amounts.

1) 15% (100% for bonds issued before August 6, 1997) of the adjusted basis of the property at the beginning of the 24-month period.

2) $5,000.

Special rule for bonds issued after July 30, 1996. Generally for bonds issued after July 30, 1996, property that you reasonably expect by exercising due diligence to be qualified zone property by an initial testing date will be treated as qualified zone property for the period before that date.

The ***initial testing date*** is generally the date that is 18 months after the later of the following dates.

1) The issue date of the bond issue financing the qualified zone property.

2) The date this property is first placed in service (or, if earlier, the date that is 3 years (5 years for certain construction projects) after the issue date).

However, the issuer of the bonds can choose to use any earlier date that comes after the bond issue date as the initial testing date.

Interest not deductible. No deduction will be allowed for interest on any financing provided from a bond if the interest accrues in any year in which either of the following occurs.

1) Substantially all of the facility that was financed ceases to be used in an empowerment zone or enterprise community.

2) The principal user of the facility ceases to be an enterprise zone business.

This rule does not apply if the use of the facility ceases to qualify because of bankruptcy or the termination or revocation of the designation as an empowerment zone or enterprise community.

In addition, interest will remain deductible if the issuer and principal user try in good faith to meet the requirements and any failure is corrected within a reasonable period after discovery.

More information. For more information, see Internal Revenue Code section 1394 and the regulations under that section.

Environmental Cleanup Cost Deduction

This deduction provides businesses with an incentive to clean up certain sites that are contaminated with hazardous substances. Your business does not have to be in an empowerment zone or enterprise community to qualify for this deduction.

You can choose to deduct "qualified environmental cleanup costs" in the tax year you pay or incur the cost. You can do this instead of adding the cost to the basis of your property (and, if the property is depreciable, recovering the cost by taking depreciation deductions over a specified recovery period).

This special tax treatment is generally available for qualified environmental cleanup costs you pay or incur after August 5, 1997, and before January 1, 2001.

Qualified environmental cleanup costs. Qualified environmental cleanup costs are generally costs you pay or incur to abate or control a hazardous substance (as defined by Internal Revenue Code section 198(d)) at a "qualified contaminated site."

Qualified contaminated site. A qualified contaminated site must meet all of the following requirements.

1) You hold it for use in a trade or business, for the production of income, or as inventory.

2) It is within a "targeted area."

3) There has been a release, threat of release, or disposal of a hazardous substance at or on the site.

You must get a statement from the designated state environmental agency that the site meets requirements (2) and (3).

Targeted area. All of the following areas are targeted areas.

1) A population census tract (or equivalent county division defined by the Bureau of the Census) with a poverty rate of at least 20%.

2) A population census tract with a population of less than 2,000 that meets the following two requirements.

   a) More that 75% of the tract is zoned for commercial or industrial use.

   b) The tract has a common border with one or more of the tracts described in (1).

3) An empowerment zone.

4) The following two supplemental empowerment zones that were designated on December 21, 1994.

   a) Cleveland, OH.

   b) Los Angeles, CA.

5) An enterprise community (designations effective December 21, 1994).

6) A site included as a brownfields pilot project of the Environmental Protection Agency before February 1, 1997.

Recapture. This deduction may have to be recaptured as ordinary income under section 1245 when you sell or otherwise dispose of the property that would have received an addition to basis if you had not elected this deduction.

More information. For more information about the environmental cleanup cost deduction, see Internal Revenue Code section 198.

Qualified Zone Academy Bonds

Beginning in 1998, state or local governments can issue qualified zone academy bonds to raise funds for the use of a "qualified zone academy." However, these bonds require a private business contribution. Certain banks, insurance companies, and corporations actively engaged in the business of lending money can receive a tax credit as an incentive to hold these bonds. For more information about claiming the credit, see ***Form 8860,*** *Qualified Zone Academy Bond Credit.*

TIP *Contact the appropriate state or local government agency to find out if qualified zone academy bonds are available in your area.*

Qualified zone academy. A qualified zone academy is a public school (or academic program within a public school) at the secondary level or below that meets certain requirements. It must be located in either an empowerment zone or an enterprise community, or there must be a reasonable expectation when the bonds are issued that at least 35% of the school's students (or program's participants) will be eligible for free or reduced-cost lunches under the school lunch program established under the National School Lunch Act. A qualified zone academy must also meet other requirements.

Private business contribution requirement. Before qualified zone academy bonds can be issued, the local educational agency (as defined in section 14101 of the Elementary and Secondary Education Act of 1965) must obtain written commitments from private entities for qualified contributions with a present value (as of the bond issue date) of not less than 10% of the proceeds of the bond issue.

A qualified contribution is a contribution made with the approval of the local educational agency of any property or service from the following list.

1) Equipment for use in the qualified zone academy.
2) Technical assistance in developing curriculum or in training teachers to promote appropriate market driven technology in the classroom.
3) Services of employees as volunteer mentors.
4) Internships, field trips, or other educational opportunities outside the academy for students.
5) Any other property or service specified by the local educational agency.

More information. For more information about qualified zone academy bonds, see Internal Revenue Code section 1397E and the regulations under that section.

Work Opportunity Credit

The work opportunity credit provides businesses with an incentive to hire individuals from groups that have a particularly high unemployment rate or other special employment needs. Your business does not have to be in an empowerment zone or enterprise community to qualify for this credit. You can claim the credit if you pay or incur "qualified first-year wages" to a "targeted group employee" who begins work for you after September 1996.

CAUTION *At the time this publication was printed, this credit was set to expire for individuals who begin work for you after June 1999.*

Targeted group employee. A targeted group employee is any employee who has been certified by your state employment security agency (SESA) as a:

1) Recipient of assistance under Aid to Families with Dependent Children (AFDC) or its successor program, Temporary Assistance for Needy Families (TANF),
2) Veteran,
3) Ex-felon,
4) High-risk youth,
5) Vocational rehabilitation referral,
6) Summer youth employee,
7) Food stamp recipient, or
8) Supplemental security income (SSI) recipient.

The employee must meet the requirements explained in the instructions to Form 8850.

State certification required. An employee is not considered a targeted group employee without SESA certification. To receive certification, submit ***Form 8850,*** *Pre-Screening Notice and Certification Request for the Work Opportunity and Welfare-to-Work Credits,* to your SESA.

You must either:

1) Receive the certification by the day the individual begins work, or
2) Do both of the following:
   a) Complete Form 8850 by the day you offer the individual a job, and
   b) Submit the form to your SESA by the 21st day after the individual begins work.

Qualified first-year wages. Qualified first-year wages are qualified wages you pay or incur for work performed by a targeted group employee during the 1-year period beginning on the date the individual begins work for you. Qualified wages are generally wages subject to the Federal Unemployment Tax Act (FUTA) without regard to the FUTA dollar limit, but not more than $6,000 each tax year for each employee ($3,000 each tax year for a summer youth employee).

If the work performed by the employee during more than half of any pay period qualifies under FUTA as agricultural labor, the first $6,000 of that employee's wages subject to social security and Medicare taxes are qualified wages. For a special rule that applies to railroad employees, see Internal Revenue Code section 51(h)(1)(B).

Nonqualified wages. See Form 5884 for a complete list of wages that do not qualify for the credit. Some of the most common wages that do not qualify include wages you pay or incur to an employee who:

1) Has worked for you for more than 1 year,
2) Is your relative or dependent,
3) You rehired, if he or she was not a targeted group employee when employed earlier, or
4) Does not work for you for at least 120 hours.

Amount of credit. The following table shows the rate you apply to qualified first-year wages you pay or incur each tax year to a targeted group employee who works the number of hours shown. The table also shows the maximum credit you can claim each tax year for each targeted group employee.

Table 4. Rate and Maximum Credit Each Tax Year for Each Targeted Group Employee Who Begins Work After September 1997

Hours Worked	Rate	Maximum Qualified First-Year Wages	Maximum Credit
At least 400	40%	$6,000*	$2,400
Fewer than 400 but at least 120	25%	6,000*	1,500

*$3,000 for a summer youth employee

Claiming the credit. Use ***Form 5884,*** *Work Opportunity Credit,* to claim this credit.

Effect on salary and wage deduction. In general, you must reduce the deduction on your income tax return for salaries and wages by the amount of your work opportunity credit.

Effect on empowerment zone employment credit. Wages you use to claim the work opportunity credit cannot be used to figure the empowerment zone employment credit. In addition, they reduce the maximum qualified zone wages you can use to claim the empowerment zone employment credit for an employee who qualifies you for both credits.

Effect of welfare-to-work credit. You cannot claim both the work opportunity credit and the welfare-to-work credit for the same employee during the same tax year.

More information. For more information about the work opportunity credit, see Form 5884.

Welfare-to-Work Credit

The welfare-to-work credit provides businesses with an incentive to hire long-term family assistance recipients. Your business does not have to be in an empowerment zone or enterprise community to qualify for this credit. You can claim the credit if you pay or incur "qualified wages" during the first 2 years of employment to a "long-term family assistance recipient" who begins work for you after December 1997.

CAUTION *At the time this publication was printed, this credit was set to expire for individuals who begin work for you after June 1999.*

Long-term family assistance recipient. A long-term family assistance recipient is an individual who has been certified by your state employment security agency (SESA) as a member of a family that:

1) Has received assistance payments from Aid to Families with Dependent Children (AFDC) or its successor program, Temporary Assistance for Needy Families (TANF), for at least 18 consecutive months ending on the hiring date,
2) Receives assistance payments from AFDC or TANF for any 18 months (whether or not consecutive) beginning after August 5, 1997, and is hired not more than 2 years after the end of the earliest 18-month period, or
3) Stops being eligible after August 5, 1997, for assistance payments because federal or state law limits the maximum period that assistance is payable, and is hired not more than 2 years after that eligibility for assistance ends.

State certification required. An individual is not considered a long-term family assistance recipient without SESA certification. To receive certification, submit ***Form 8850,*** *Pre-Screening Notice and Certification Request for the Work Opportunity and Welfare-to-Work Credits,* to your SESA.

You must either:

1) Receive the certification by the day the individual begins work, or
2) Do both of the following:
   a) Complete Form 8850 by the day you offer the individual a job, and
   b) Submit the form to your SESA by the 21st day after the individual begins work.

Qualified wages. Qualified wages are generally wages subject to the Federal Unemployment Tax Act (FUTA) without regard to the FUTA dollar limit, but not more than $10,000 each tax year for each employee.

If the work performed by the employee during more than half of any pay period qualifies under FUTA as agricultural labor. The first $10,000 of that employee's wages subject to social security and Medicare taxes are qualified wages. For a special rule that applies to railroad employees, see Internal Revenue Code section 51A(b)(5)(C).

For this credit, qualified wages also generally include the following amounts paid or incurred by the employer that are normally excludable from the employee's gross income.

1) Amounts received for medical care under accident and health plans.

2) Employer-provided coverage under accident and health plans.

3) Certain amounts excludable under an educational assistance program, or that would be excludable but for the expiration of the exclusion. (At the time this publication was printed, this exclusion was set to expire for courses beginning after May 2000.)

4) Amounts excludable under a dependent care assistance program.

Nonqualified wages. See Form 8861 for a complete list of wages that do not qualify for the credit. Some of the most common wages that do not qualify include wages you pay or incur to an employee who:

1) Has worked for you for more than 2 years,

2) Is your relative or dependent,

3) You rehired, if he or she was not a long-term family assistance recipient when employed earlier, or

4) Does not either:

a) Work for you for at least 180 days, or

b) Complete at least 400 hours of service.

Amount of credit. The following table shows the rate you apply to the qualified wages you pay or incur during each year of employment. The table also shows the maximum credit you can claim each tax year for each qualified employee.

Table 5. Rate and Maximum Credit Each Tax Year for Each Long-Term Family Assistance Recipient Who Begins Work After December 1997

Rate for Qualified First-Year Wages	Rate for Qualified Second-Year Wages	Maximum Qualified Wages	Maximum Credit
35%	50%	$10,000	$5,000

Qualified first-year wages. Qualified first-year wages are qualified wages you pay or incur for work performed by a long-term family assistance recipient during the 1-year period beginning on the date the individual begins work for you.

Qualified second-year wages. Qualified second-year wages are qualified wages you pay or incur for work performed by a long-term family assistance recipient during the 1-year period beginning on the day after the last day of the first-year wage period.

Claiming the credit. Use ***Form 8861,*** *Welfare-to-Work Credit,* to claim this credit.

Effect on salary and wage deduction. In general, you must reduce the deduction on your income tax return for salaries and wages by the amount of your welfare-to-work credit.

Effect on empowerment zone employment credit. Wages you use to claim the welfare-to-work credit cannot be used to figure the empowerment zone employment credit. In addition, they reduce the maximum qualified zone wages you can use to claim the empowerment zone employment credit for an employee who qualifies you for both credits.

Effect of work opportunity credit. You cannot claim both the welfare-to-work credit and the work opportunity credit for the same employee during the same tax year.

More information. For more information about the welfare-to-work credit, see Form 8861.

Indian Employment Credit

The Indian employment credit provides businesses with an incentive to hire certain individuals who live on or near an Indian reservation. Your business does not have to be in an empowerment zone or enterprise community to qualify for this credit. You can claim the credit if you pay or incur "qualified wages" to a "qualified employee."

CAUTION *At the time this publication was printed, this credit was set to expire for tax years beginning after 2003.*

Qualified employee. A qualified employee, for any tax period, is any employee who meets all of the following tests.

1) The employee is an enrolled member of an Indian tribe or the spouse of an enrolled member of an Indian tribe.

2) The employee performs substantially all of his or her services for you within an Indian reservation.

3) While performing those services, the employee has his or her main home on or near that reservation.

Also, more than 50% of the wages you pay or incur to the employee during the year must be for services performed in your trade or business.

Nonqualified employees. The following individuals are not qualified employees.

1) Any employee to whom you pay or incur wages (including wages for services outside an Indian reservation) at a rate that would cause you to pay the employee more than $30,000 if the rate applied for an entire year. (This wage limit may be adjusted for inflation for tax years beginning after 1999.)

2) Certain related taxpayers.

3) Certain dependents.

4) Any 5% owner.

5) Any individual who performs services involving certain gaming activities.

6) Any individual who performs services in a building housing certain gaming activities.

Qualified wages. Qualified wages are any wages you pay or incur for services performed by an employee while the employee is a qualified employee (defined earlier). Wages are generally defined as those wages subject to the Federal Unemployment Tax Act (FUTA) without regard to the FUTA dollar limit.

Also treat as qualified wages any qualified employee health insurance costs you pay or incur on behalf of a qualified employee. However, do not include any amount you pay or incur for health insurance under a salary reduction arrangement.

The total amount of qualified wages (including qualified employee health insurance costs) you can use to figure the credit cannot be more than $20,000 for each employee each tax year.

Effect of work opportunity credit. Qualified wages do not include any amount you pay or incur for work performed by a qualified employee during the 1-year period beginning on the date the individual begins work for you, if you use any part of these wages to claim the work opportunity credit.

Amount of credit. In most cases, the credit is 20% of the excess of your current year qualified wages and qualified employee health insurance costs over the sum of the corresponding amounts you paid or incurred during calendar year 1993.

Claiming the credit. Use ***Form 8845,*** *Indian Employment Credit,* to claim this credit.

Effect on salary and wage deduction. In general, you must reduce the deduction on your income tax return for salaries and wages and health insurance costs by the amount of your Indian employment credit.

Early termination of employee. Generally, if you terminate a qualified employee sooner than 1 year after the date of initial employment, you cannot claim a credit for that employee for the tax year the employment is terminated. Also, you may have to recapture credits allowed in earlier years.

These rules do not apply in the following situations.

- The employee voluntarily quits.
- The employee is terminated because of misconduct.
- The employee becomes disabled. However, if the disability ends before the end of the first year of employment, you must offer reemployment to the former employee.

More information. For more information about the Indian employment credit, see Form 8845.

Depreciation of Property Used on Indian Reservations

Depreciation is a loss in the value of property over the time the property is being used. You can get back your cost of certain property by taking deductions for depreciation. This includes the cost of certain buildings and equipment you use in your business.

Special depreciation rules apply to qualified property that you place in service on an Indian reservation after 1993 and before 2004. Your business does not have to use the property in an empowerment zone or enterprise community to use these special rules. These special rules allow you to use shorter recovery periods to figure your depreciation deduction for qualified property. As a result, your deduction is larger.

Qualified property. Property eligible for the shorter recovery periods is 3-, 5-, 7-, 10-, 15-, and 20-year property and nonresidential real property. You must use this property predominantly in the active conduct of a trade or business within an Indian reservation. Real property you rent to others that is located on an Indian reservation is also eligible for the shorter recovery periods.

The following property is ***not*** qualified property.

1) Property used or located outside an Indian reservation on a regular basis.

2) Property acquired directly or indirectly from certain related persons.

3) Property placed in service for purposes of conducting or housing certain gaming activities.

Qualified property also does not include any property you must depreciate under the Alternative Depreciation System (ADS). Determine whether property is qualified without regard to the choice to use ADS and after applying the special rules for listed property not used predominantly in a qualified business (discussed in Publication 946).

Qualified infrastructure property. Item (1) above does not apply to qualified infrastructure property located outside the reservation that is used to connect with qualified infrastructure property within the reservation.

Qualified infrastructure property is property that meets all the following requirements.

1) It meets the requirements listed earlier under *Qualified property* (except that it can be outside the reservation).

2) It benefits the tribal infrastructure.

3) It is available to the general public.

4) It was placed in service in connection with the active conduct of a trade or business within a reservation.

Infrastructure property includes, but is not limited to, roads, power lines, water systems, railroad spurs, and communications facilities.

Recovery periods. The following table shows the shorter recovery periods you can use to depreciate qualified property.

Table 6. Recovery Periods for Qualified Property

Property Class	Recovery Period
3-year	2 years
5-year	3 years
7-year	4 years
10-year	6 years
15-year	9 years
20-year	12 years
Nonresidential real property	22 years

More information. For more information about depreciation, including the special rules that apply to property used on Indian reservations, see Publication 946, *How To Depreciate Property.*

Exclusion of Capital Gains From DC Zone Assets

If you hold a District of Columbia Enterprise Zone (DC Zone) asset more than 5 years, you will not have to include any "qualified capital gain" from its sale or exchange in your gross income. This exclusion applies to an interest in, or property of, certain businesses operating in the District of Columbia.

DC Zone Asset

A DC Zone asset is any of the following.

- DC Zone business stock.
- DC Zone partnership interest.
- DC Zone business property.

CAUTION *In determining whether any property is a DC Zone asset, continue to treat the DC Zone as an empowerment zone for years after 2002.*

DC Zone business stock. DC Zone business stock is any stock in a U.S. corporation that is originally issued after 1997, if all of the following requirements are met.

1) You acquired the stock before January 1, 2003, at its original issue solely in exchange for cash. (This requirement is also met if you acquired the stock before, on, or after January 1, 2003, from another person in whose hands it was DC Zone business stock.)
2) The corporation was a DC Zone business (or was being organized as a DC Zone business) at the time the stock was issued.
3) The corporation qualified as a DC Zone business during substantially all of your holding period for the stock. (This requirement is also met if the corporation ceased to qualify as a DC Zone business after the 5-year period beginning on the date you acquired the stock. However, your qualified capital gain cannot be more than what it would have been if you had sold the stock on the date the corporation ceased to qualify.)

Redemptions of business stock. Stock will not qualify as DC Zone business stock if the issuing corporation makes certain redemptions of its stock within 2 years before or 2 years after the date the stock was issued. For details, see Internal Revenue Code sections 1400B(b)(2)(B) and 1202(c)(3).

DC Zone partnership interest. A DC Zone partnership interest is any capital or profits interest in a U.S. partnership that is originally issued after 1997, if all of the following requirements are met.

1) You acquired the partnership interest from the partnership before January 1, 2003, in exchange for cash. (This requirement is also met if you acquired the partnership interest before, on, or after January 1, 2003, from another person in whose hands it was a DC Zone partnership interest.)
2) The partnership was a DC Zone business (or was being organized as a DC Zone business) at the time the partnership interest was acquired.
3) The partnership qualified as a DC Zone business during substantially all of your holding period for the partnership interest. (This requirement is also met if the partnership ceased to qualify as a DC Zone business after the 5-year period beginning on the date you acquired the partnership interest. However, your qualified capital gain cannot be more than what it would have been if you had sold the partnership interest on the date the partnership ceased to qualify.)

Redemptions of partnership interest. A partnership interest will not qualify as a DC Zone partnership interest if the partnership makes certain acquisitions of its partnership interests within 2 years before or 2 years after the date the partnership interest was issued. For details, see Internal Revenue Code sections 1400B(b)(3), 1400B(b)(2)(B), and 1202(c)(3).

DC Zone business property. DC Zone business property is tangible property acquired after 1997 that meets all of the following requirements.

1) You acquired the property before January 1, 2003. (This requirement is also met if you acquired the property before, on, or after January 1, 2003, from another person in whose hands it was DC Zone business property.)
2) You did not acquire the property from a related person or member of a controlled group of which you are a member.
3) Your basis in the property is not determined either by its adjusted basis in the hands of the person from whom you acquired it or under the stepped-up basis rules for property acquired from a decedent.

4) You were the first person to use the property in the DC Zone. (This requirement is also met if you acquired the property from another person in whose hands it was DC Zone business property.)

5) Substantially all of the use of the property was in your DC Zone business during substantially all of your holding period for that property. (This requirement is also met if you stopped using the property in your DC Zone business, or your business ceased to qualify as a DC Zone business, after the 5-year period beginning on the date you acquired the property. However, your qualified capital gain cannot be more than what it would have been if you had sold the property on the date you stopped using the property in your DC Zone business or on the date your business ceased to qualify.)

Special rule for substantially improved buildings. Buildings (and land on which they are located) will be treated as having met requirements (1) through (4), listed earlier under *DC Zone business property,* if you substantially improved the buildings before January 1, 2003. Buildings are substantially improved if, during any 24-month period beginning after 1997, your additions to the basis of the property are more than the greater of the following amounts.

1) 100% of the adjusted basis of the property at the beginning of the 24-month period.

2) $5,000.

DC Zone business. A DC Zone business for this capital gains exclusion is an enterprise zone business as defined earlier under *Increased Section 179 Deduction,* with the following exceptions.

- The 35% employee residence requirement listed in item (6) does not apply.
- The 50% of gross income requirement listed in item (2) is increased to 80%.
- No area other than the DC Zone can be treated as an empowerment zone or enterprise community.

For this purpose, the DC Zone is treated as including all census tracts in the District of Columbia with a poverty rate of 10% or more as determined by the 1990 census.

Qualified Capital Gain

Qualified capital gain is any gain recognized on the sale or exchange of a DC Zone asset that is a capital asset or property used in a trade or business as defined in section 1231(b) of the Internal Revenue Code (generally real property or depreciable personal property). But it does not include any of the following gains.

- Gain attributable to periods before 1998 or after December 31, 2007.
- Section 1245 gain. See chapter 3 in Publication 544, *Sales and Other Dispositions of Assets.*
- Section 1250 gain figured as if section 1250 applied to ***all*** depreciation rather than the additional depreciation. See chapter 3 in Publication 544.
- Gain attributable to real property or an intangible asset that is not an integral part of a DC Zone business.
- Gain attributable, directly or indirectly, in whole or in part, to a transaction with a related person. For the definition of a related person, see chapter 2 in Publication 544.

Other rules. Rules similar to certain rules in section 1202 of the Internal Revenue Code apply to interests in pass-through entities, certain tax-free transfers, contributions to capital after the original stock issuance date, and short positions.

How To Get More Information

You can order free publications and forms, ask tax questions, and get more information from the IRS in several ways. By selecting the method that is best for you, you will have quick and easy access to tax help.

Free tax services. To find out what services are available, get Publication 910, *Guide to Free Tax Services.* It contains a list of free tax publications and an index of tax topics. It also describes other free tax information services, including tax education and assistance programs and a list of TeleTax topics.

Personal computer. With your personal computer and modem, you can access the IRS on the Internet at **www.irs.ustreas.gov.** While visiting our Web Site, you can select:

- *Frequently Asked Tax Questions* to find answers to questions you may have.
- *Fill-in Forms* to complete tax forms on-line.
- *Forms and Publications* to download forms and publications or search publications by topic or keyword.
- *Comments & Help* to e-mail us with comments about the site or with tax questions.
- *Digital Dispatch* and *IRS Local News Net* to receive our electronic newsletters on hot tax issues and news.

You can also reach us with your computer using any of the following.

- Telnet at **iris.irs.ustreas.gov**
- File Transfer Protocol at **ftp.irs.ustreas.gov**
- Direct dial (by modem) **703–321–8020**

TaxFax Service. Using the phone attached to your fax machine, you can receive forms, instructions, and tax information by calling **703–368–9694.** Follow the directions from the prompts. When you order forms, enter the catalog number for the form you need. The items you request will be faxed to you.

Phone. Many services are available by phone.

- *Ordering forms, instructions, and publications.* Call **1–800–829–3676** to order current and prior year forms, instructions, and publications.
- *Asking tax questions.* Call the IRS with your tax questions at **1–800–829–1040.**
- *TTY/TDD equipment.* If you have access to TTY/TDD equipment, call **1–800–829–4059** to ask tax questions or to order forms and publications.
- *TeleTax topics.* Call **1–800–829–4477** to listen to pre-recorded messages covering various tax topics.

Evaluating the quality of our telephone services. To ensure that IRS representatives give accurate, courteous, and professional answers, we evaluate the quality of our telephone services in several ways.

- A second IRS representative sometimes monitors live telephone calls. That person only evaluates the IRS assistor and does not keep a record of any taxpayer's name or tax identification number.
- We sometimes record telephone calls to evaluate IRS assistors objectively. We hold these recordings no longer than one week and use them only to measure the quality of assistance.
- We value our customers' opinions. Throughout this year, we will be surveying our customers for their opinions on our service.

Walk-in. You can pick up certain forms, instructions, and publications at many post offices, libraries, and IRS offices. Some libraries and IRS offices have an extensive collection of products available to print from a CD-ROM or photocopy from reproducible proofs.

Index

Tax Publications for Business Taxpayers

See *How To Get More Information* for a variety of ways to get publications, including by computer, phone, and mail.

General Guides

1 Your Rights as a Taxpayer
17 Your Federal Income Tax (For Individuals)
225 Farmer's Tax Guide
334 Tax Guide for Small Business
509 Tax Calendars for 1999
553 Highlights of 1998 Tax Changes
595 Tax Highlights for Commercial Fishermen
910 Guide to Free Tax Services

Employer's Guides

15 Employer's Tax Guide (Circular E)
15-A Employer's Supplemental Tax Guide
51 Agricultural Employer's Tax Guide (Circular A)
80 Federal Tax Guide For Employers in the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands (Circular SS)
179 Guía Contributiva Federal Para Patronos Puertorriqueños (Circular PR)
926 Household Employer's Tax Guide

Specialized Publications

378 Fuel Tax Credits and Refunds
463 Travel, Entertainment, Gift, and Car Expenses
505 Tax Withholding and Estimated Tax
510 Excise Taxes for 1999
515 Withholding of Tax on Nonresident Aliens and Foreign Corporations
517 Social Security and Other Information for Members of the Clergy and Religious Workers
527 Residential Rental Property
533 Self-Employment Tax
534 Depreciating Property Placed in Service Before 1987
535 Business Expenses
536 Net Operating Losses
537 Installment Sales
538 Accounting Periods and Methods
541 Partnerships
542 Corporations
544 Sales and Other Dispositions of Assets
551 Basis of Assets
556 Examination of Returns, Appeal Rights, and Claims for Refund
560 Retirement Plans for Small Business (SEP, SIMPLE, and Keogh Plans)
561 Determining the Value of Donated Property
583 Starting a Business and Keeping Records
587 Business Use of Your Home (Including Use by Day-Care Providers)
594 Understanding the Collection Process
597 Information on the United States-Canada Income Tax Treaty
598 Tax on Unrelated Business Income of Exempt Organizations
686 Certification for Reduced Tax Rates in Tax Treaty Countries
901 U.S. Tax Treaties
908 Bankruptcy Tax Guide
911 Direct Sellers
925 Passive Activity and At-Risk Rules
946 How To Depreciate Property
947 Practice Before the IRS and Power of Attorney
953 International Tax Information for Businesses
1544 Reporting Cash Payments of Over $10,000
1546 The Problem Resolution Program of the Internal Revenue Service

Spanish Language Publications

1SP Derechos del Contribuyente
579SP Cómo Preparar la Declaración de Impuesto Federal
594SP Comprendiendo el Proceso de Cobro
850 English-Spanish Glossary of Words and Phrases Used in Publications Issued by the Internal Revenue Service
1544SP Informe de Pagos en Efectivo en Exceso de $10,000 (Recibidos en una Ocupación o Negocio)

Commonly Used Tax Forms

See *How To Get More Information* for a variety of ways to get forms, including by computer, fax, phone, and mail. Items with an asterisk are available by fax. For these orders only, use the catalog numbers when ordering.

Form Number and Title	Catalog Number
W-2 Wage and Tax Statement	10134
W-4 Employee's Withholding Allowance Certificate*	10220
940 Employer's Annual Federal Unemployment (FUTA) Tax Return*	11234
940EZ Employer's Annual Federal Unemployment (FUTA) Tax Return*	10983
941 Employer's Quarterly Federal Tax Return	17001
1040 U.S. Individual Income Tax Return*	11320
Sch A & B Itemized Deductions & Interest and Ordinary Dividends*	11330
Sch C Profit or Loss From Business*	11334
Sch C-EZ Net Profit From Business*	14374
Sch D Capital Gains and Losses*	11338
Sch E Supplemental Income and Loss*	11344
Sch F Profit or Loss From Farming*	11346
Sch H Household Employment Taxes*	12187
Sch J Farm Income Averaging*	25513
Sch R Credit for the Elderly or the Disabled*	11359
Sch SE Self-Employment Tax*	11358
1040-ES Estimated Tax for Individuals*	11340
1040X Amended U.S. Individual Income Tax Return*	11360
1065 U.S. Partnership Return of Income	11390
Sch D Capital Gains and Losses	11393
Sch K-1 Partner's Share of Income, Credits, Deductions, etc.	11394
1120 U.S. Corporation Income Tax Return	11450
1120-A U.S. Corporation Short-Form Income Tax Return	11456
1120S U.S. Income Tax Return for an S Corporation	11510
Sch D Capital Gains and Losses and Built-In Gains	11516
Sch K-1 Shareholder's Share of Income, Credits, Deductions, etc.	11520
2106 Employee Business Expenses*	11700
2106-EZ Unreimbursed Employee Business Expenses*	20604
2210 Underpayment of Estimated Tax by Individuals, Estates, and Trusts*	11744
2441 Child and Dependent Care Expenses*	11862
2848 Power of Attorney and Declaration of Representative*	11980
3800 General Business Credit	12392
3903 Moving Expenses*	12490
4562 Depreciation and Amortization*	12906
4797 Sales of Business Property*	13086
4868 Application for Automatic Extension of Time To File U.S. Individual Income Tax Return*	13141
5329 Additional Taxes Attributable to IRAs, Other Qualified Retirement Plans, Annuities, Modified Endowment Contracts, and MSAs*	13329
6252 Installment Sale Income*	13601
8283 Noncash Charitable Contributions*	62299
8300 Report of Cash Payments Over $10,000 Received in a Trade or Business*	62133
8582 Passive Activity Loss Limitations*	63704
8606 Nondeductible IRAs*	63966
8822 Change of Address*	12081
8829 Expenses for Business Use of Your Home*	13232

Appendix 6

Internal Revenue Service Form 8845, "Indian Employment Credit"

Form **8845**

Department of the Treasury
Internal Revenue Service

Indian Employment Credit

▶ Attach to your return.

OMB No. 1545-1417

2000

Attachment Sequence No. **113**

Name(s) as shown on return | Identifying number

Part I Current Year Credit

1	Total of qualified wages and qualified employee health insurance costs paid or incurred during the tax year	1	
2	Calendar year 1993 qualified wages and qualified employee health insurance costs (see instructions). If none, enter -0-	2	
3	Incremental increase. Subtract line 2 from line 1	3	
4	Current year credit. Multiply line 3 by 20% (.20) (see instructions)	4	
5	Indian employment credits from pass-through entities (see table below)	5	
6	**Total current year credit.** Add lines 4 and 5. (S corporations, partnerships, estates, trusts, and cooperatives, see instructions.)	6	

If you are a—	Then enter total of current year Indian employment credit(s) from—
a Shareholder	Schedule K-1 (Form 1120S), lines 12d, 12e, or 13
b Partner	Schedule K-1 (Form 1065), lines 12c, 12d, or 13
c Beneficiary	Schedule K-1 (Form 1041), line 14
d Patron	Written statement from cooperative

Part II Tax Liability Limit (See **Who Must File Form 3800** to find out if you complete Part II or file Form 3800.)

7	Regular tax before credits: • Individuals. Enter the amount from Form 1040, line 40 • Corporations. Enter the amount from Form 1120, Schedule J, line 3; Form 1120-A, Part I, line 1; or the applicable line of your return • Estates and trusts. Enter the sum of the amounts from Form 1041, Schedule G, lines 1a and 1b, or the amount from the applicable line of your return			7	
8	Alternative minimum tax: • Individuals. Enter the amount from Form 6251, line 28 • Corporations. Enter the amount from Form 4626, line 15 • Estates and trusts. Enter the amount from Form 1041, Schedule I, line 39			8	
9	Add lines 7 and 8			9	
10a	Foreign tax credit	10a			
b	Credit for child and dependent care expenses (Form 2441, line 9)	10b			
c	Credit for the elderly or the disabled (Schedule R (Form 1040), line 20)	10c			
d	Education credits (Form 8863, line 18)	10d			
e	Child tax credit (Form 1040, line 47)	10e			
f	Mortgage interest credit (Form 8396, line 11)	10f			
g	Adoption credit (Form 8839, line 14)	10g			
h	District of Columbia first-time homebuyer credit (Form 8859, line 11)	10h			
i	Possessions tax credit (Form 5735, line 17 or 27)	10i			
j	Credit for fuel from a nonconventional source	10j			
k	Qualified electric vehicle credit (Form 8834, line 19)	10k			
l	Add lines 10a through 10k			10l	
11	Net income tax. Subtract line 10l from line 9			11	
12	Tentative minimum tax (see instructions): • Individuals. Enter the amount from Form 6251, line 26 • Corporations. Enter the amount from Form 4626, line 13 • Estates and trusts. Enter the amount from Form 1041, Schedule I, line 37	12			
13	Net regular tax. Subtract line 10l from line 7. If zero or less, enter -0-	13			
14	Enter 25% (.25) of the excess, if any, of line 13 over $25,000 (see instructions)	14			
15	Enter the greater of line 12 or line 14			15	
16	Subtract line 15 from line 11. If zero or less, enter -0-			16	
17	**Indian employment credit allowed for the current year.** Enter the **smaller** of line 6 or line 16 here and on Form 1040, line 49; Form 1120, Schedule J, line 6d; Form 1120-A, Part I, line 4a; Form 1041, Schedule G, line 2c; or the applicable line of your return			17	

For Paperwork Reduction Act Notice, see page 3. Cat. No. 16146D Form **8845** (2000)

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

Employers of American Indians who are qualified employees (see **Definitions**) use Form 8845 to claim the Indian employment credit.

In most cases, the credit is 20% of the excess of an employer's current year qualified wages and qualified employee health insurance costs over the sum of the corresponding amounts paid or incurred during calendar year 1993 by the employer (or predecessor). For purposes of the credit, the total amount of qualified wages and costs may not exceed $20,000 for each employee.

Definitions

Qualified wages means any wages paid or incurred by an employer for services performed by an employee while such employee is a qualified employee (see below). It does **not** include wages attributable to services rendered during the 1-year period beginning with the day the employee starts work for the employer if any portion of such wages is used in figuring the work opportunity credit on Form 5884. Wages has the same meaning given in section 51.

Qualified employee health insurance costs means any amount paid or incurred by an employer for health insurance to the extent such amount is attributable to coverage provided to any employee while such employee is a qualified employee. No amount paid or incurred for health insurance under a salary reduction arrangement may be included.

Qualified employee means, for any tax period, any employee of an employer if the employee meets **all three** of the following tests.

1. The employee is an enrolled member, or the spouse of an enrolled member, of an Indian tribe. Each tribe determines who qualifies for enrollment and what documentation, if any, is issued as proof of enrollment status. Examples of appropriate documentation will vary from one tribe to another and may include a tribal membership card, Certified Degree of Indian Blood (CDIB) card, or letter from the tribe or tribal enrollment office. Employers should retain a copy of the proof of enrollment status provided by the employee.

2. Substantially all the services performed during that period by the employee for the employer are performed within an Indian reservation (defined below).

3. The employee's principal residence while performing such services is on or near the reservation where the services are performed.

However, the employee shall be treated as a qualified employee for any tax year of the employer only if more than 50% of the wages paid or incurred by the employer to the employee during the year are for services performed in the employer's trade or business. Each member of a controlled group must meet this requirement independently.

The following are **not** qualified employees.

- Any individual who bears any of the relationships described in sections 152(a)(1) through 152(a)(8) to, or is a dependent described in section 152(a)(9) of, the employer.
- If the employer is a corporation, any individual who bears any of the relationships described in sections 152(a)(1) through 152(a)(8) to, or is a dependent described in section 152(a)(9) of, an individual who owns (or is considered to own under section 267(c)) more than 50% in value of the outstanding stock of the corporation.
- If the employer is an estate or trust, any individual who is a grantor, beneficiary, or fiduciary of the estate or trust (or a dependent, as described in section 152(a)(9), of that individual), or any individual who is a relative, as described in sections 152(a)(1) through 152(a)(8), of the grantor, beneficiary, or fiduciary of the estate or trust.
- If the employer is other than a corporation, estate, or trust, any individual who owns directly or indirectly more than 50% of the capital and profits interest, including constructive ownership, in the entity.
- Any person who owns (or is considered to own under section 318) more than 5% of the outstanding or voting stock of the employer or, if not a corporate employer, more than 5% of the capital or profits interest in the employer.
- Any individual who performs services involving the conduct of Class I, II, or III gaming as defined in section 4 of the Indian Gaming Regulatory Act and any individual performing any services in a building housing such gaming activity.

Indian tribe means any Indian tribe, band, nation, pueblo, or other organized group or community, including any Alaska Native village or regional or village corporation, as defined in, or established under, the Alaska Native Claims Settlement Act, that is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians. See the Federal Register dated March 13, 2000 (65 FR 13298), for the most recent listing of federally recognized Indian tribes.

Indian reservation means a reservation as defined in section 3(d) of the Indian Financing Act of 1974 or section 4(10) of the Indian Child Welfare Act of 1978.

Early Termination of Employee

Generally, if the employer terminates a qualified employee less than 1 year after the date of initial employment, the following rules apply.

- No wages or qualified employee health insurance costs may be taken into account for the tax year the employment is terminated.
- Any credits allowed for prior tax years by reason of wages paid or incurred by the employer to that employee must be recaptured. Report the amount on the line for recapture taxes on the income tax return and write "45A" to the left of the entry. Also, any carryback or carryover of the credit is adjusted.

These rules do not apply if:

- The employee voluntarily quits;
- The employee is terminated because of misconduct; or
- The employee becomes disabled. However, if the disability ends before the end of the first year of employment, the employer must offer reemployment to the former employee.

An employee is not treated as terminated if the corporate employer is acquired by another corporation covered under the rules in section 381(a) and the employee continues to be employed by the acquiring corporation. Nor is a mere change in the form of conducting the trade or business treated as a termination if the employee continues to be employed in such trade or business and the taxpayer retains a substantial interest in such trade or business.

Specific Instructions

Part I—Current Year Credit

Figure the current year credit for your trade or business on lines 1 through 4. Skip lines 1 through 4 if you are claiming only a credit that was allocated to you from a pass-through entity. The following rules apply to lines 1 and 2.

- An employee is not a qualified employee if the total amount of wages paid or incurred by the employer to the employee (whether or not for services within an Indian reservation) exceeds the amount determined at an annual rate of $30,000. This wage limit may be adjusted for inflation for tax years beginning after 2000.

• The total amount of qualified wages and qualified employee health insurance costs for each qualified employee for any tax year is limited to $20,000.

• Members of a controlled group of corporations and businesses under common control are treated as a single employer in determining the credit.

Line 1

Enter the total qualified wages and qualified employee health insurance costs paid or incurred for qualified employees during the tax year.

Line 2

Enter the total qualified wages and qualified employee health insurance costs paid or incurred by the employer (or predecessor) for qualified employees during **calendar year 1993** (as if section 45A had been in effect during 1993). If none, enter zero.

For a short tax year, multiply the amount determined above by a fraction, the numerator of which is the number of days in the short tax year and the denominator of which is 365. Enter the result on line 2.

Line 4

In most cases, you must reduce the deductions on your return for salaries and wages and health insurance costs by the line 4 credit amount. This reduction must be made even if you cannot take the full credit this year because of the tax liability limit. If you capitalized any costs on which you figured the credit, reduce the amount capitalized by the amount of the credit attributable to these costs.

Line 6

If you have a credit from a passive activity, stop here and go to Form 3800.

S corporations and partnerships. Allocate the line 6 credit among the shareholders or partners. Attach Form 8845 to Form 1120S or 1065 and show the credit for each shareholder or partner on Schedule K-1. Electing large partnerships, include this credit in "general credits."

Estates and trusts. The line 6 credit is allocated between the estate or trust and the beneficiaries in proportion to the income allocable to each. On the dotted line to the left of the amount on line 6, the estate or trust should enter its part of the total Indian employment credit. Label it "1041 Portion" and use this amount in Part II (or on Form 3800, if required) to figure the credit to claim on Form 1041.

Cooperatives. Most tax-exempt organizations cannot take the Indian employment credit, but a cooperative described in section 1381(a) takes the Indian employment credit to the extent it has tax liability. Any excess is shared among its patrons. But any credit recapture under item 2 of **Early Termination of Employee** applies as if the cooperative had claimed the entire credit and had not shared it among its patrons.

Who Must File Form 3800

Complete **Form 3800,** General Business Credit, instead of completing Part II of Form 8845 to figure the tax liability limit for the credit if for this year you have:

• More than one of the credits included in the general business credit listed below,

• A carryback or carryforward of any of the credits,

• A credit from a passive activity, or

• General credits from an electing large partnership (Schedule K-1 (Form 1065-B)).

The general business credit consists of the following credits.

• Investment (Form 3468).

• Work opportunity (Form 5884).

• Welfare-to-work (Form 8861).

• Alcohol used as fuel (Form 6478).

• Research (Form 6765).

• Low-income housing (Form 8586).

• Enhanced oil recovery (Form 8830).

• Disabled access (Form 8826).

• Renewable electricity production (Form 8835).

• Indian employment (Form 8845).

• Employer social security and Medicare taxes paid on certain employee tips (Form 8846).

• Orphan drug (Form 8820).

• Contributions to selected community development corporations (Form 8847).

• Trans-Alaska pipeline liability fund.

The empowerment zone employment credit, while a component of the general business credit, is figured separately on Form 8844 and is never carried to Form 3800.

Part II—Tax Liability Limit

Line 12

Although you may not owe alternative minimum tax (AMT), you generally must still compute the tentative minimum tax (TMT) to figure your credit. For a small corporation exempt from the AMT under section 55(e), enter zero. Otherwise, complete **and** attach the applicable AMT form or schedule and enter the TMT on line 12.

Line 14

See section 38(c)(3) for special rules that apply to married couples filing separate returns, controlled corporate groups, regulated investment companies, real estate investment trusts, and estates and trusts.

Line 17

If you cannot use all of the credit because of the tax liability limit (line 16 is smaller than line 6), carry the excess credit back 1 year and then forward for 20 years. See the separate Instructions for Form 3800 for details.

Paperwork Reduction Act Notice. We ask for the information on this form to carry out the Internal Revenue laws of the United States. You are required to give us the information. We need it to ensure that you are complying with these laws and to allow us to figure and collect the right amount of tax.

You are not required to provide the information requested on a form that is subject to the Paperwork Reduction Act unless the form displays a valid OMB control number. Books or records relating to a form or its instructions must be retained as long as their contents may become material in the administration of any Internal Revenue law. Generally, tax returns and return information are confidential, as required by section 6103.

The time needed to complete and file this form will vary depending on individual circumstances. The estimated average time is:

Recordkeeping	7 hr., 39 min.
Learning about the law or the form	1 hr., 40 min.
Preparing and sending the form to the IRS	1 hr., 53 min.

If you have comments concerning the accuracy of these time estimates or suggestions for making this form simpler, we would be happy to hear from you. See the instructions for the tax return with which this form is filed.